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This document consists of 37 pages
Copy 25 of 25 copies

CAPABILITIES/LIMITATIONS STUDY

PROPULSION FIELD LABORATORY

SANTA SUSANA, CALIFORNIA

R O C K E T D Y N E

A DIVISION OF NORTH AMERICAN AVIATION, INC.

CANOGA PARK, CALIFORNIA

FINAL REPORT

VOLUME II

ENGINEERING JOB NO. 1541-1

FEBRUARY 20, 1959

REFERENCE REPORT NO. RMP/NAA-5

PARSONS

THE RALPH M. PARSONS COMPANY

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HDMSm00000137

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VOLUME II

DRAWINGS

DRAWING NO.	TITLE
1	PROPULSION FIELD LABORATORY — AREA TOPOGRAPHY
2	AREAL GEOLOGY
3	REGIONAL MAP — SURFACE WATER
4	SURFACE WINDS — SUMMER-DAY
5	SURFACE WINDS — SUMMER-NIGHT
6	SURFACE WINDS — WINTER-DAY
7	SURFACE WINDS — WINTER-NIGHT
8	750 METER — WIND ROSE — BURBANK, CALIFORNIA
9	1,000 METER — WIND ROSE — BURBANK, CALIFORNIA
10	POPULATION DENSITY MAP — YEAR-1950
11	POPULATION DENSITY MAP — YEAR-1957
12	POPULATION DENSITY MAP — YEAR-1980
13	POPULATION ENCROACHMENT LIMITS
14	ZONING MAP — PRESENT-1957
15	ZONING MAP — FUTURE-1980
16	TERRAIN CROSS-SECTIONS — TRE AREA
17	TERRAIN CROSS-SECTIONS — BOWL AREA
18	TERRAIN CROSS-SECTIONS — ALFA AND BRAVO AREAS
19	TERRAIN CROSS-SECTIONS — COCA AND DELTA AREAS
20	TERRAIN CROSS-SECTIONS — BOWL AND TRE TO SAN FERNANDO VALLEY
21	ULTIMATE AND RECORDED SOUND LEVELS — BOWL TEST AREA
22	PRESENT AND FUTURE ON SITE SOUND LEVELS
23	ULTIMATE AND RECORDED SOUND LEVELS—TRE TEST AREA
24	TERRAIN CROSS-SECTIONS — ALFA AND BRAVO TO SIMI VALLEY
25	ULTIMATE AND RECORDED SOUND LEVELS — ALFA TEST AREA
26	ULTIMATE AND RECORDED SOUND LEVELS — BRAVO TEST AREA
27	TERRAIN CROSS-SECTIONS — COCA AND DELTA TO SIMI VALLEY
28	ULTIMATE AND RECORDED SOUND LEVELS — COCA TEST AREA
29	ULTIMATE AND RECORDED SOUND LEVELS — DELTA TEST AREA
30	COMPLAINT HISTORY — JANUARY TO DECEMBER 1958
31	TYPICAL DOSAGE PATTERN FROM ENGINE EXHAUST
32	TYPICAL DOSAGE PATTERN FROM PROPELLANT SPILL
33	WATER SUPPLY, RECLAMATION, AND WASTE SYSTEM
34	AREA I — EXISTING AND ULTIMATE INDUSTRIAL SURFACE WATER STORAGE AREAS
35	AREA II — EXISTING AND ULTIMATE INDUSTRIAL SURFACE WATER STORAGE AREAS

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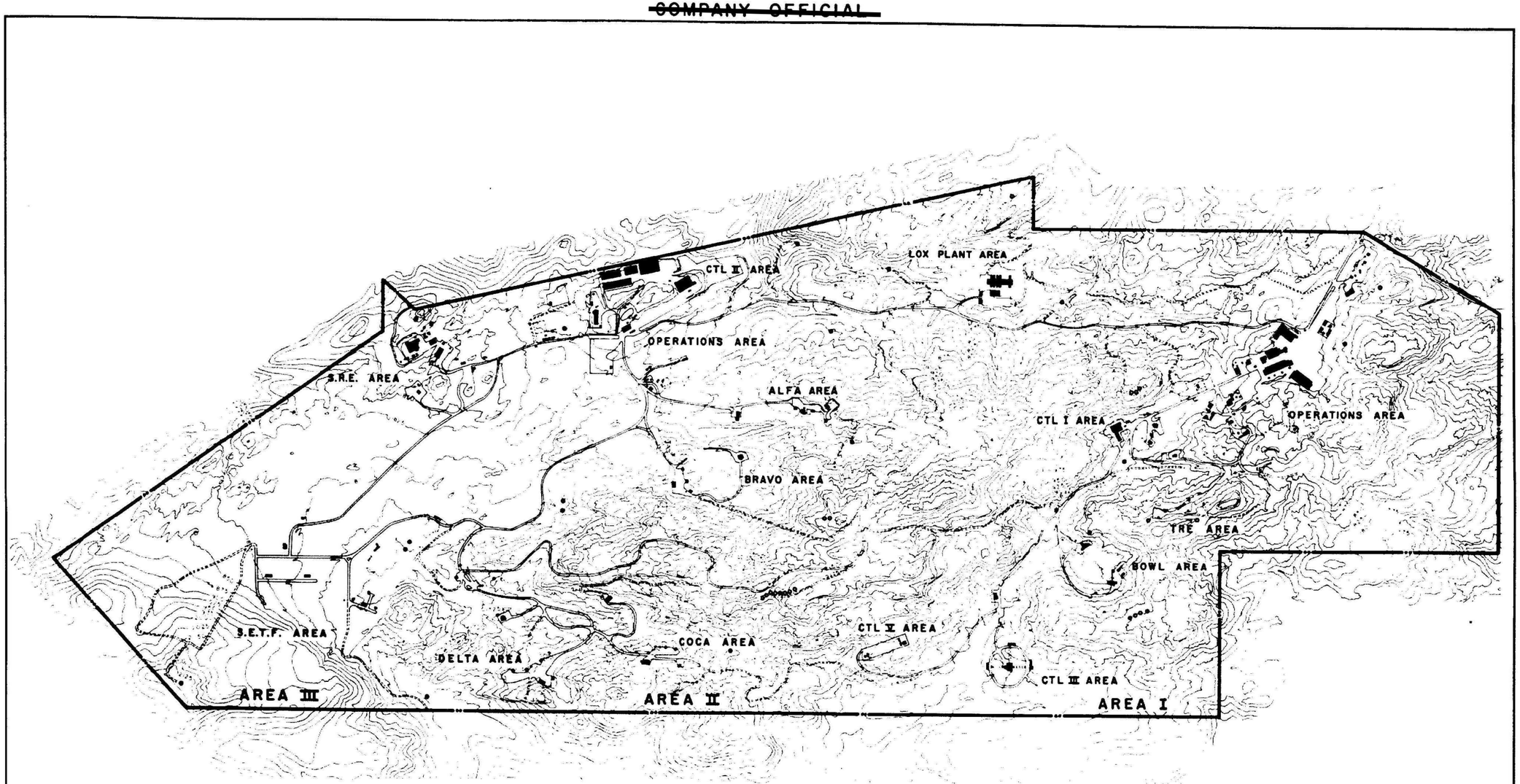

0 1/4 1/2 MILE

0 600 1200 1800 2400 FEET

GRAPHIC SCALES

LEGEND
- STRUCTURES
- WATER TANK
- WATER WELL
- ROADS
- TOPOGRAPHY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

PROPULSION FIELD LABORATORY AREA TOPOGRAPHY

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO. 1
	DATE JAN 30 1959	

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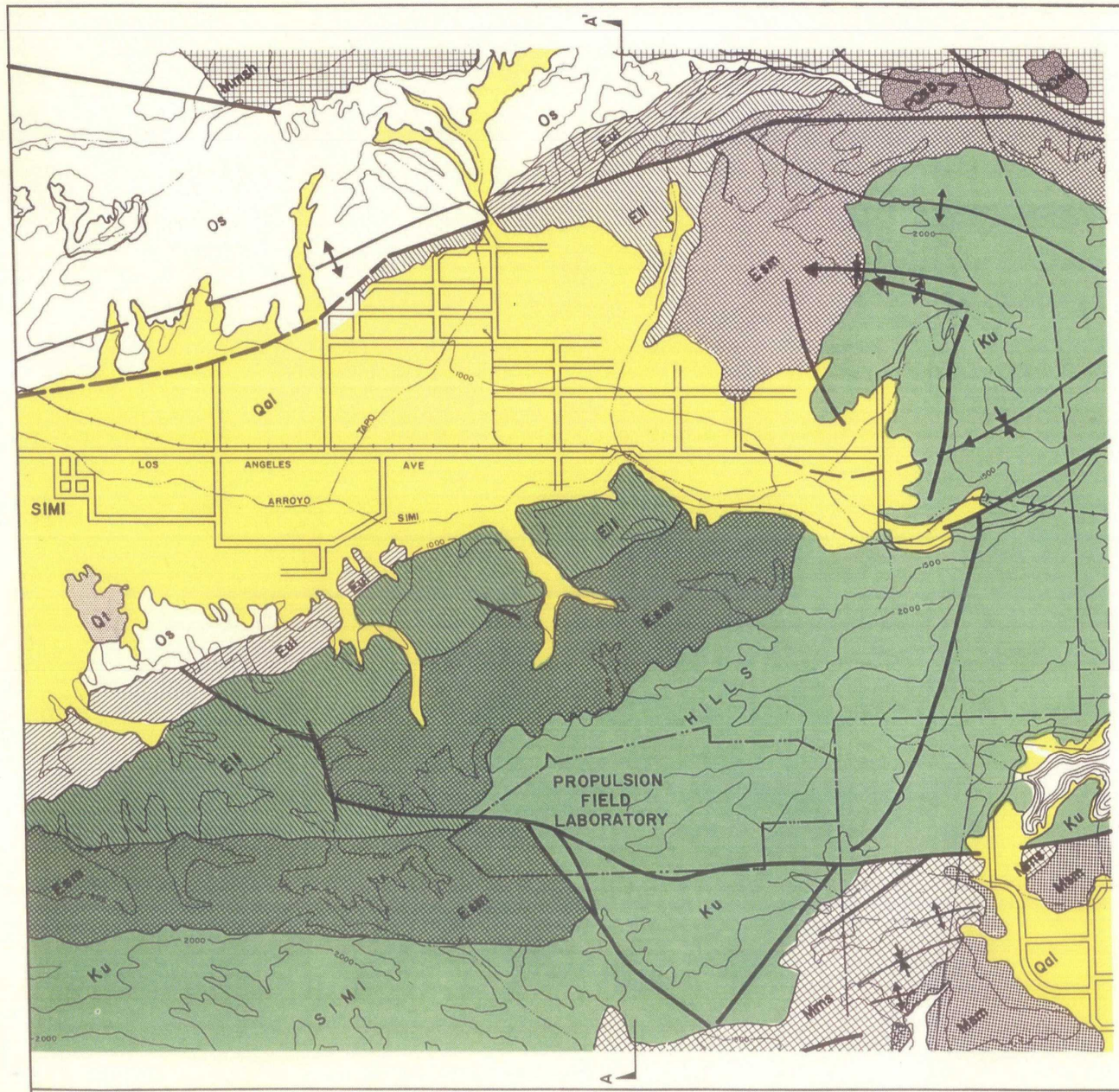

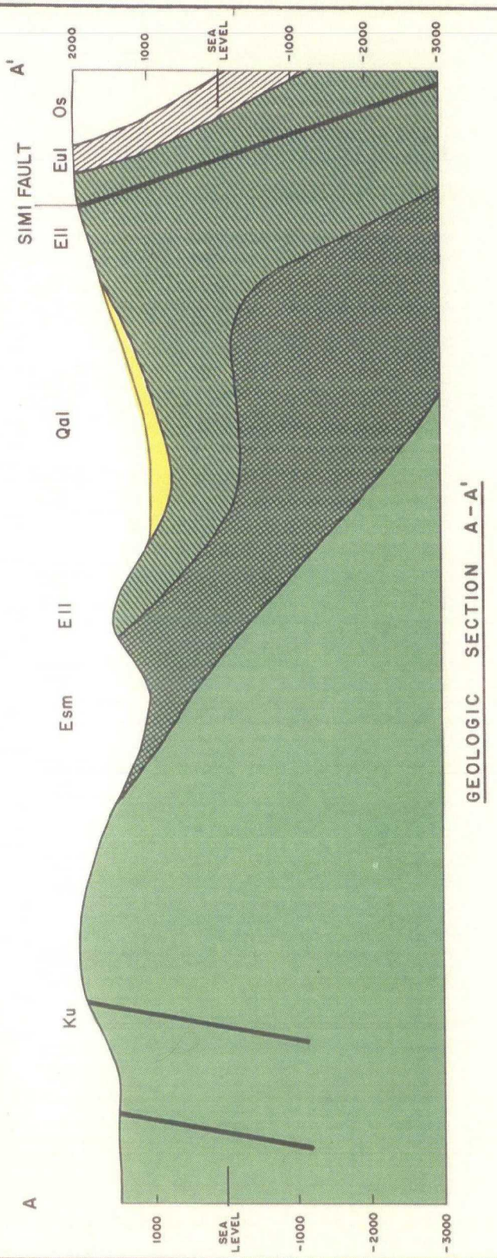

LEGEND

- STREET
- RAILROAD
- RIVERS
- CONTOURS
- CITY BOUNDARY
- COUNTY BOUNDARY
- SITE BOUNDARY
- SYNCLINE
- ANTICLINE (DASHED WHERE CONCEALED OR POORLY EXPOSED)
- FAULT

Os — SESPE FORMATION, CONTINENTAL SANDSTONE, CONGLOMERATE AND SHALE. LOCALLY WATER-BEARING.

Qal — ALLUVIUM: (SAND, GRAVEL AND CLAY) WATER-BEARING

Q1 — TERRACE DEPOSITS AND OLDER ALLUVIUM, MARINE AND CONTINENTAL GRAVEL, SAND AND CLAY. WATER-BEARING.

Esm — SANTA BARBARA FORMATION. MARINE SILT, CLAY, SAND AND GRAVEL. GENERALLY NONWATER-BEARING.

Mmss — "SANTA MARGARITA" FORMATION. MARINE SHALE, SANDSTONE AND CONGLOMERATE. GENERALLY NONWATER-BEARING.

Mmds — MODELO SHALE, MARINE. LOCALLY WATER-BEARING.

Mmds — MODELO SANDSTONE, MARINE. LOCALLY WATER-BEARING.

Eul — UPPER LLAJAS FORMATION, MARINE SANDSTONE, SOME SHALE. LOCALLY WATER-BEARING.

El — LOWER LLAJAS FORMATION, MARINE SHALE, GENERALLY NONWATER-BEARING.

Tsm — SANTA SUSANA - MARTINEZ FORMATION, MARINE SANDSTONE, CONGLOMERATE AND SHALE. LOCALLY WATER-BEARING.

Ku — UNDIFFERENTIATED FORMATIONS OF CRETACEOUS AGE, MARINE SANDSTONE, SOME CONGLOMERATE AND SHALE. LOCALLY WATER-BEARING.

GRAPHIC SCALE

1 1/2 0 1 2 MILES

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

AREAL GEOLOGY

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE JAN. 30, 1959

DRAWING NO. 2

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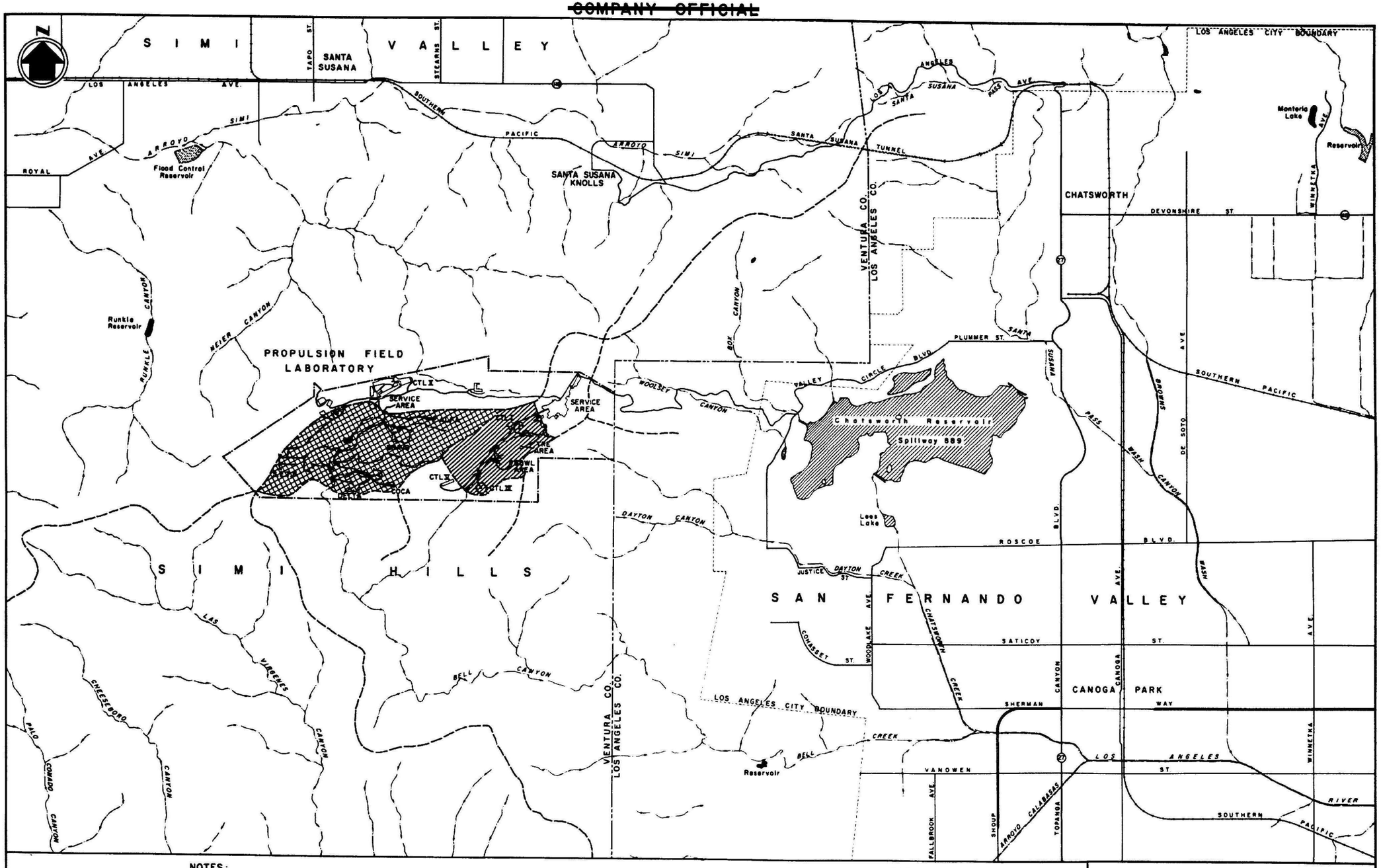

NOTES:

GRAPHIC SCALES

0 ½ 1 MILE

0 5,000 10,000 FEET

LEGEND

- ROADS
- STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY
- NATURAL DRAINAGE
- RIDGE LINE
- AREA I WATER SHED
- AREA II WATER SHED

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

REGIONAL MAP
SURFACE WATER

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

DATE JAN 30 1959

DRAWING NO. 3

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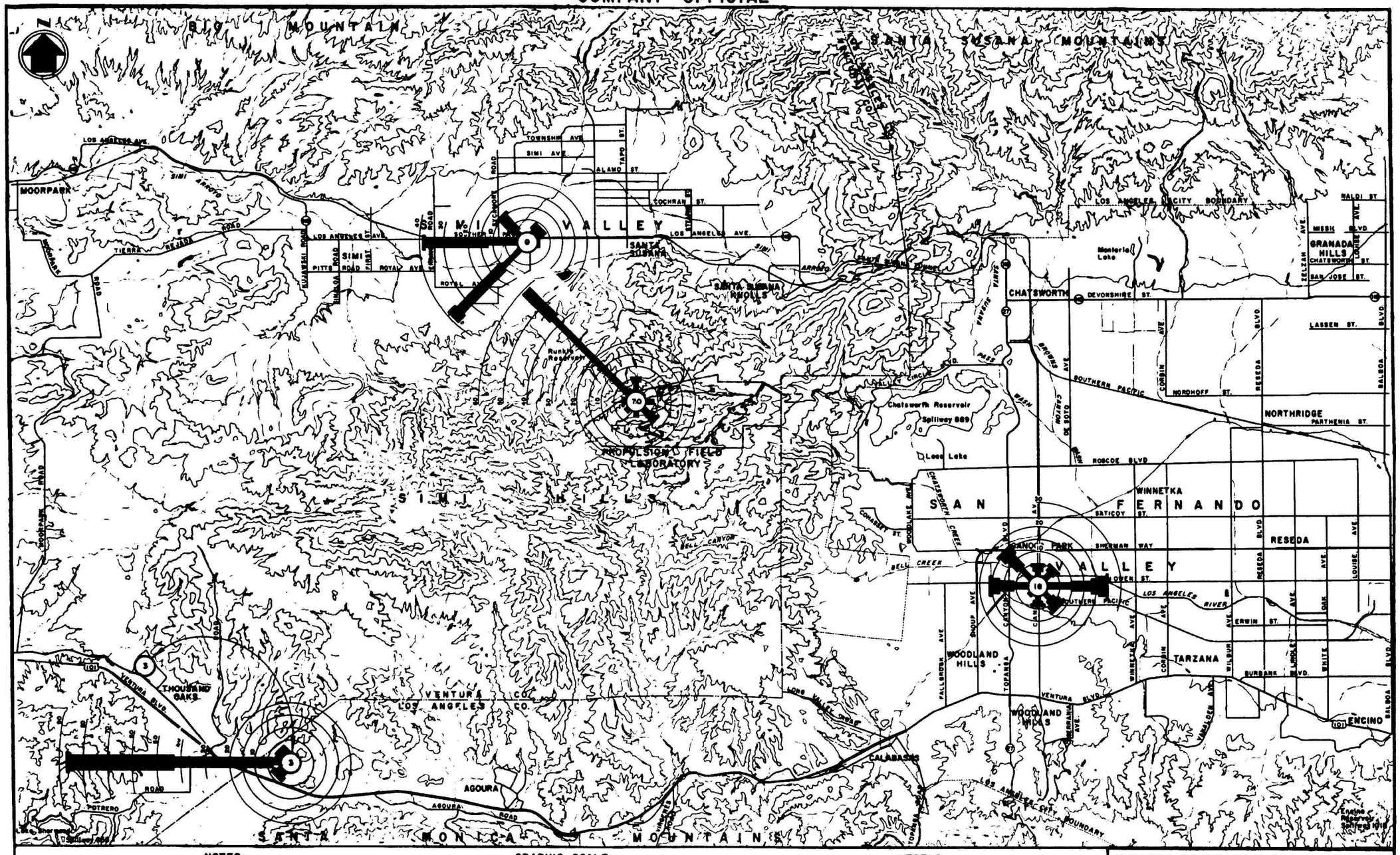

NOTES:

LOCATION	PERIOD OF RECORD	TIME OF OBSERVATION (P.S.T.)
THOUSAND OAKS	JUNE TO SEPT. 1957	1200 AND 1600
SIMI	JUNE TO SEPT. 1956	1200 AND 1600
CANOGA PARK	JUNE TO SEPT. 1956	1200, 1300, 1400, 1500 & 1600
S.R.E. AREA ATOMICS INTERNATIONAL	JUNE TO SEPT. 1957	1200, 1300, 1400, 1500 & 1600

GRAPHIC SCALE

0 1/2 1 2 3 4 MILES

WIND SPEED SCALES

1-3 4-7 8-12 13-24 24 M.P.H.

THOUSAND OAKS, SIMI, AND CANOGA PARK

4-15 16-31 31 M.P.H.

S.R.E. AREA – ATOMICS INTERNATIONAL

LEGEND

- ROADS
- (101) FEDERAL ROUTE
- (27) STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

SURFACE WINDS
SUMMER-DAY

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE 30 JAN. 1959

DRAWING NO. 4

COMPANY OFFICIAL

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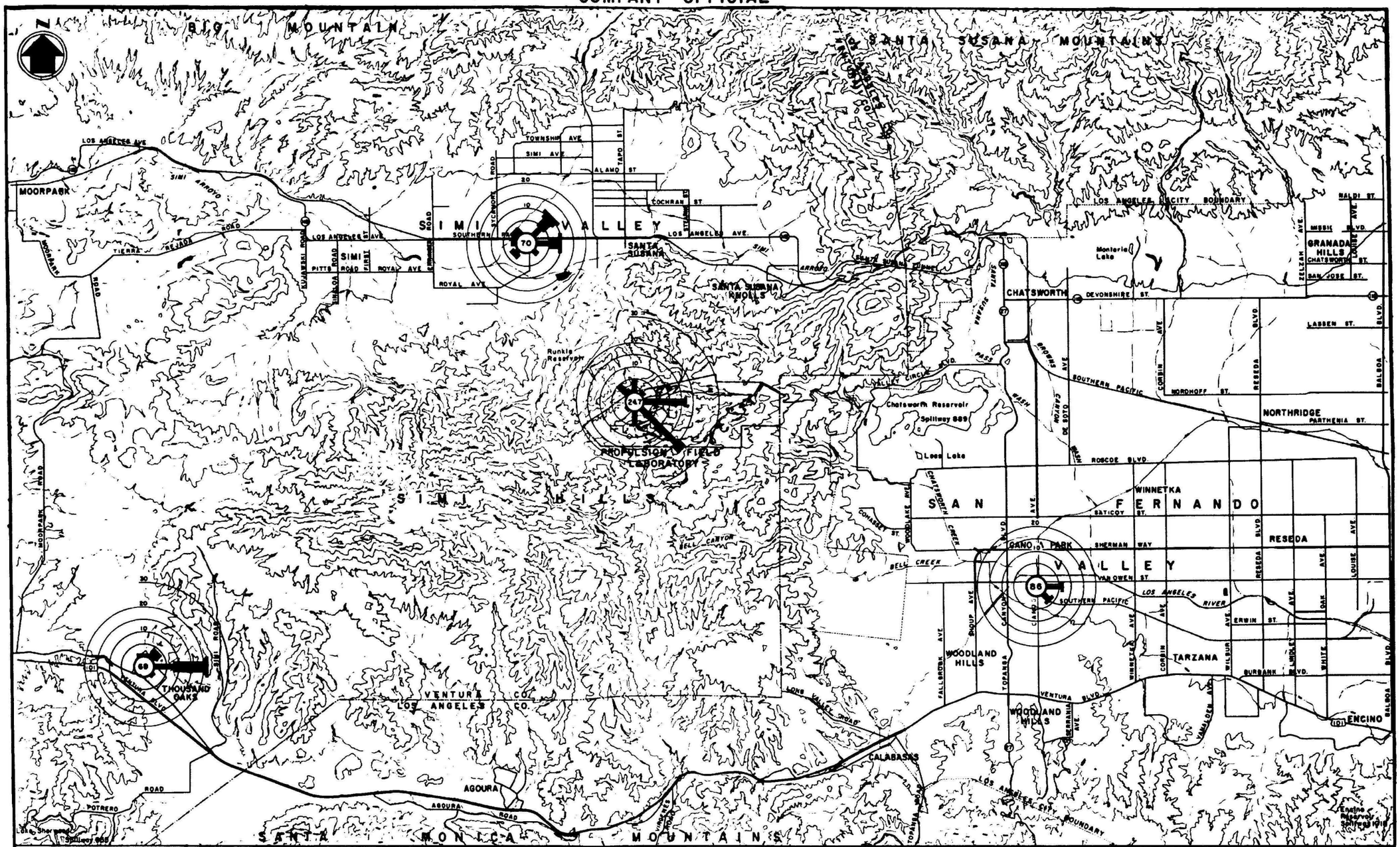


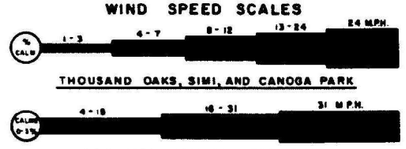
NOTES:

LOCATION	PERIOD OF RECORD	TIME OF OBSERVATION (P.S.T.)
THOUSAND OAKS	JUNE TO SEPT. 1957	0800
SIMI	JUNE TO SEPT. 1958	0800
CANOGA PARK	JUNE TO SEPT. 1956	0600, 0700 & 0800
S.R.E. AREA ATOMICS INTERNATIONAL	JUNE TO SEPT. 1957	0600, 0700 & 0800

GRAPHIC SCALE

0 1/2 1 2 3 4 MILES

WIND SPEED SCALES



THOUSAND OAKS, SIMI, AND CANOGA PARK

S.R.E. AREA - ATOMICS INTERNATIONAL

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

SURFACE WINDS
SUMMER-NIGHT

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE 30 JAN. 1959

DRAWING NO. 5

~~COMPANY OFFICIAL~~

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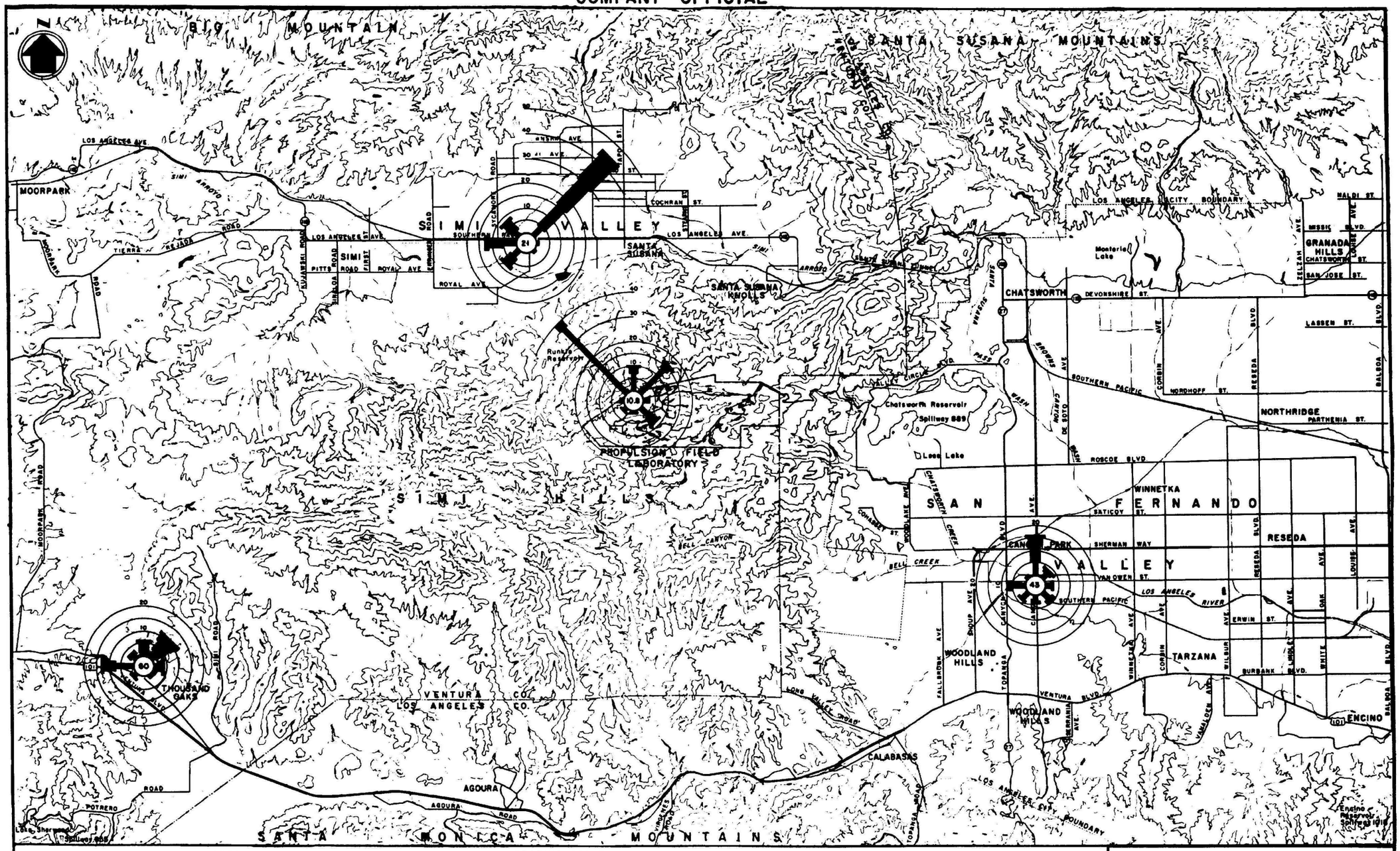
COMPANY OFFICIAL



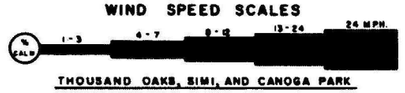
NOTES:

LOCATION	PERIOD OF RECORD	TIME OF OBSERVATION (P.S.T.)
THOUSAND OAKS	JAN., FEB. & DEC. 1957	1200 AND 1600
SIMI	DEC. 1957, JAN. & FEB. 1958	1200 AND 1600
CANOGA PARK	JAN., FEB. & DEC. 1956	1200, 1300, 1400, 1500 & 1600
S.R.E. AREA ATOMICS INTERNATIONAL	DEC. 1957, JAN. & FEB. 1958	1200, 1300, 1400, 1500 & 1600

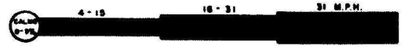
GRAPHIC SCALE

0 1/2 1 2 3 4 MILES

WIND SPEED SCALES



THOUSAND OAKS, SIMI, AND CANOGA PARK



S.R.E. AREA - ATOMICS INTERNATIONAL

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

SURFACE WINDS
WINTER-DAY

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE 30 JAN. 1959

DRAWING NO. 6

COMPANY OFFICIAL

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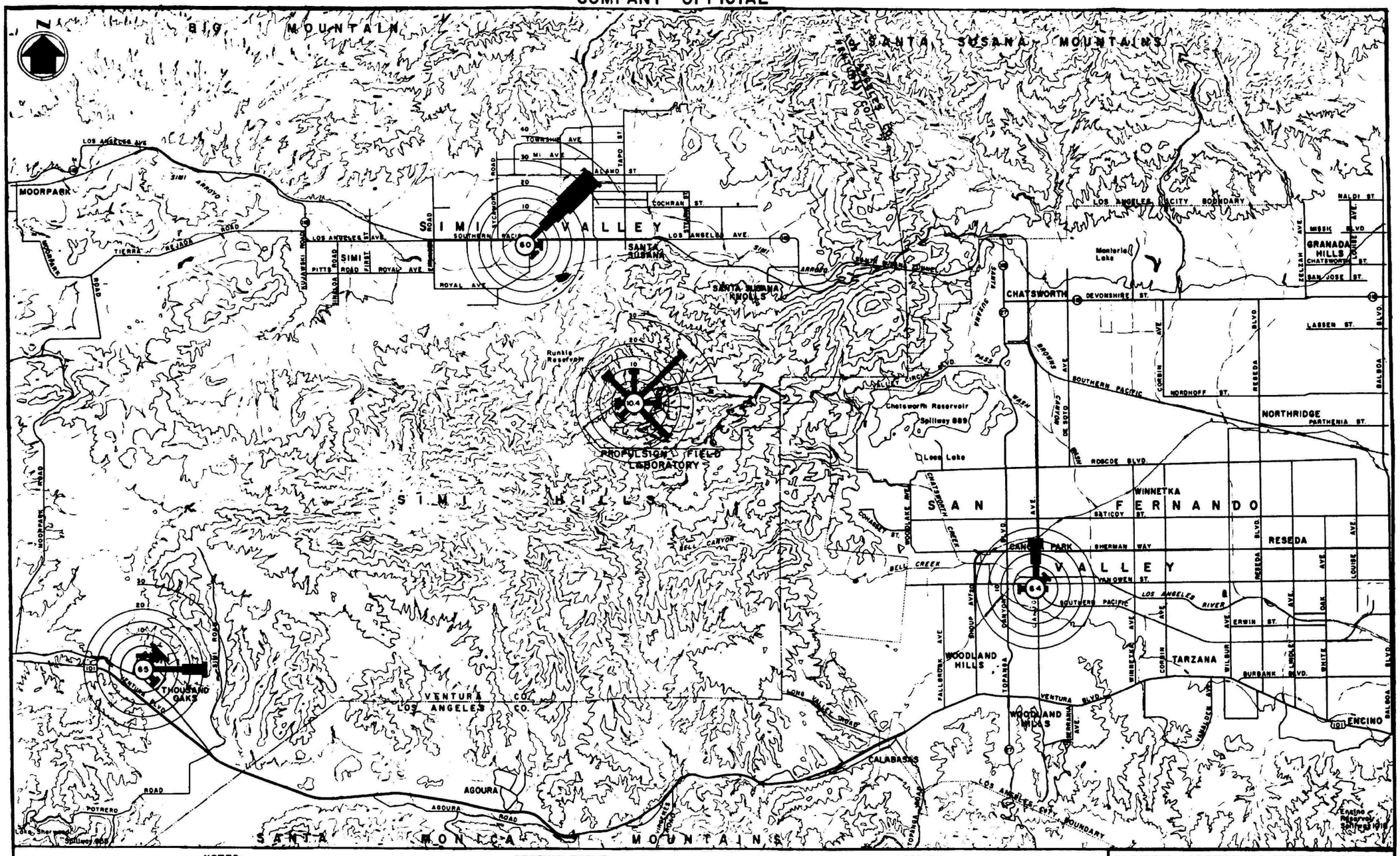
COMPANY OFFICIAL



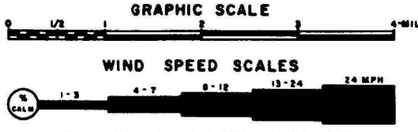
NOTES:

LOCATION	PERIOD OF RECORD	TIME OF OBSERVATION (P.S.T.)
THOUSAND OAKS	JAN., FEB. & DEC. 1957	0800
SIMI	DEC. 1957, JAN. & FEB. 1958	0800
CANOGA PARK	JAN., FEB. & DEC. 1958	0600, 0700 & 0800
S.R.E. AREA ATOMICS INTERNATIONAL	DEC. 1957, JAN. & FEB. 1958	0600, 0700 & 0800

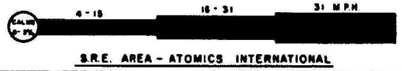
GRAPHIC SCALE

0 1/2 1 2 3 4 MILES

WIND SPEED SCALES



THOUSAND OAKS, SIMI, AND CANOGA PARK



S.R.E. AREA - ATOMICS INTERNATIONAL

LEGEND

- ROADS
- (101) FEDERAL ROUTE
- (27) STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

SURFACE WINDS
WINTER-NIGHT

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE 30 JAN. 1959

DRAWING NO. 7

COMPANY OFFICIAL

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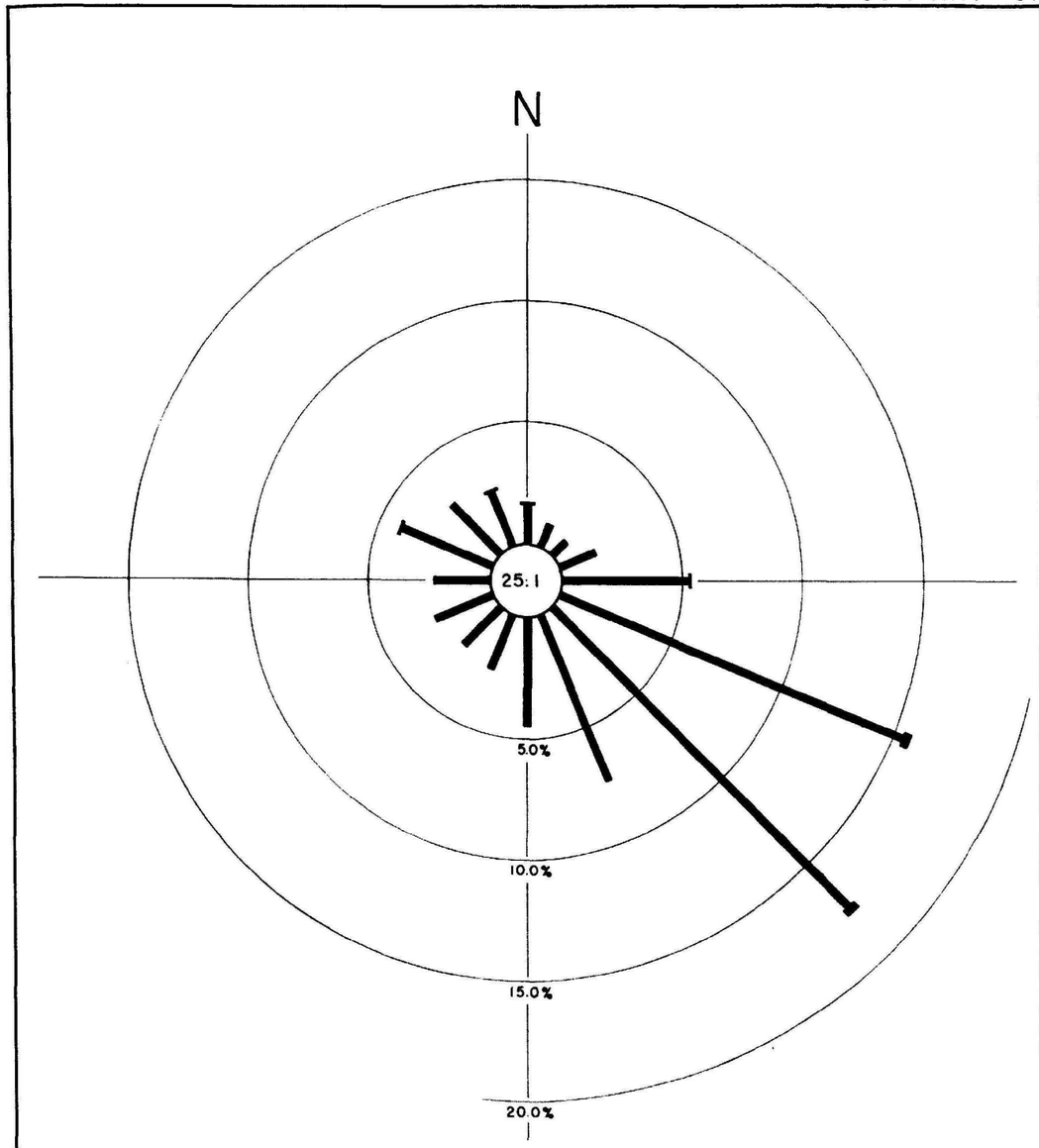
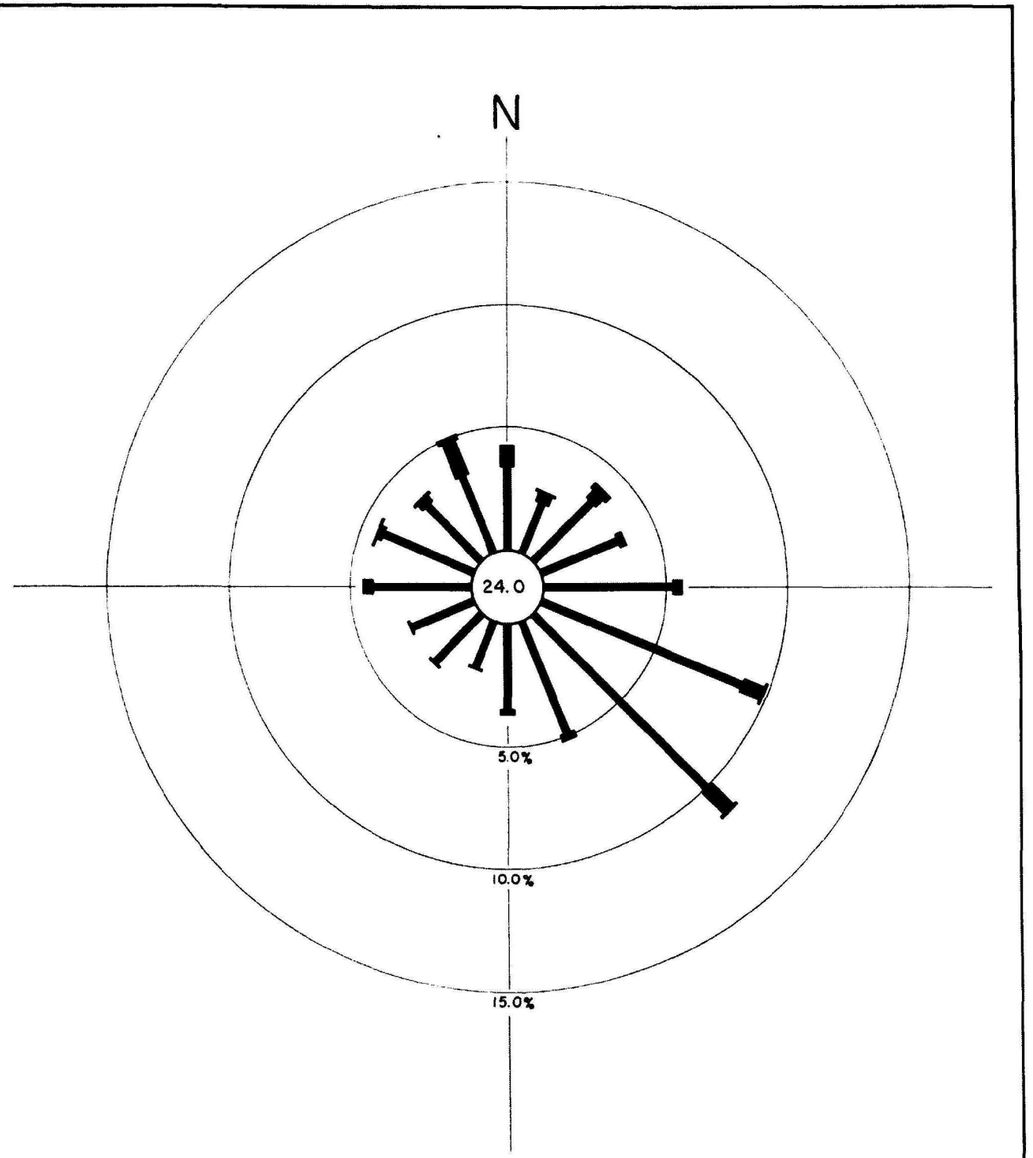
COMPANY OFFICIAL



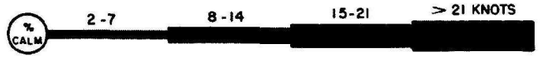
JUNE , JULY & AUGUST



DECEMBER , JANUARY & FEBRUARY

NOTES

1. OBSERVED AT LOCKHEED AIR TERMINAL, BURBANK, CALIFORNIA
2. TOTAL NUMBER OF OBSERVATIONS (JUNE, JULY & AUGUST) 2687
3. TOTAL NUMBER OF OBSERVATIONS (DECEMBER, JANUARY & FEBUARY) 2763
4. STATION ELEVATION (GROUND) 213 METERS



WIND SPEED SCALE

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

750 METER
WIND ROSE - BURBANK, CALIFORNIA

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO. 8
	DATE JAN 30, 1958	

COMPANY OFFICIAL

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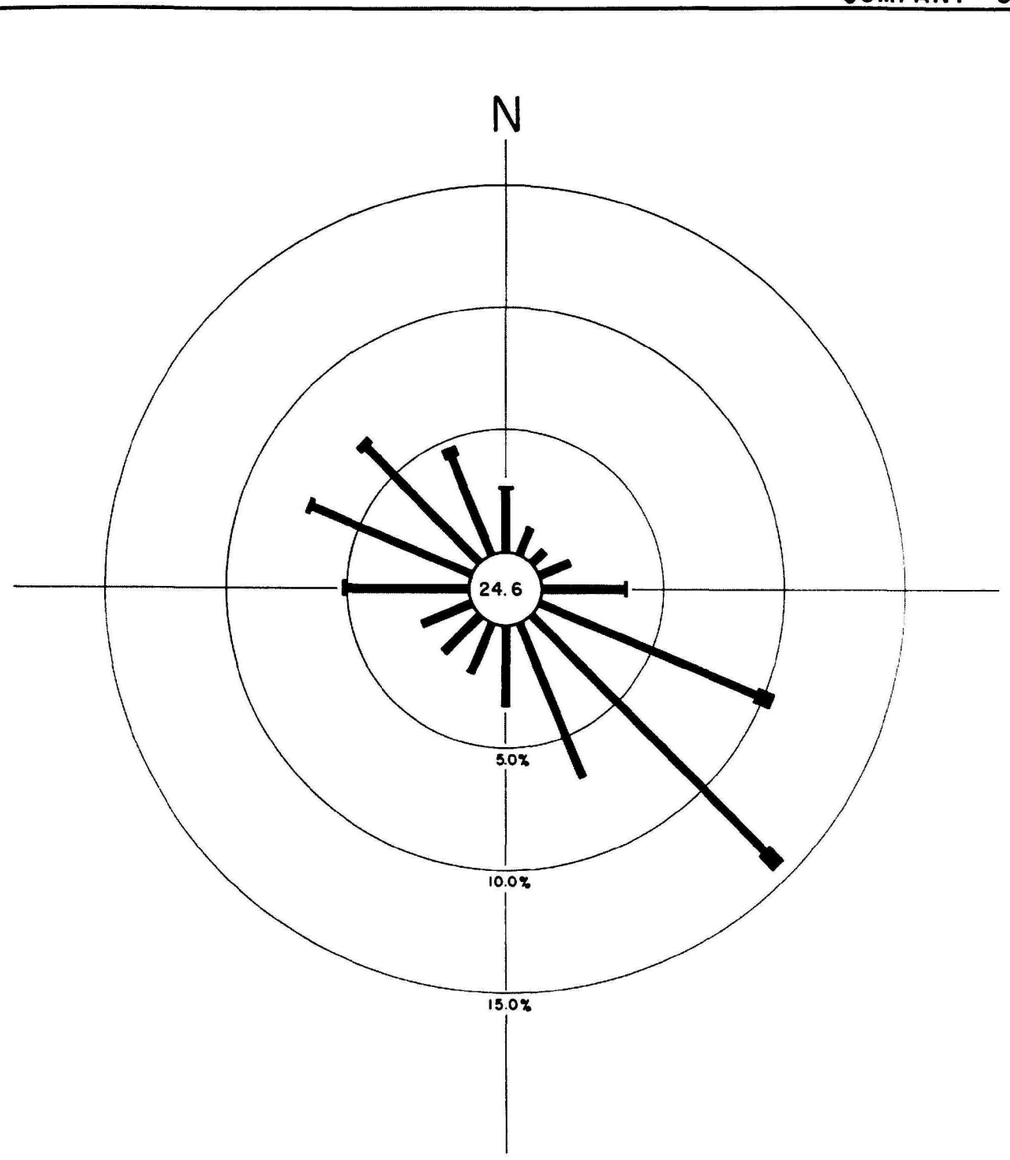
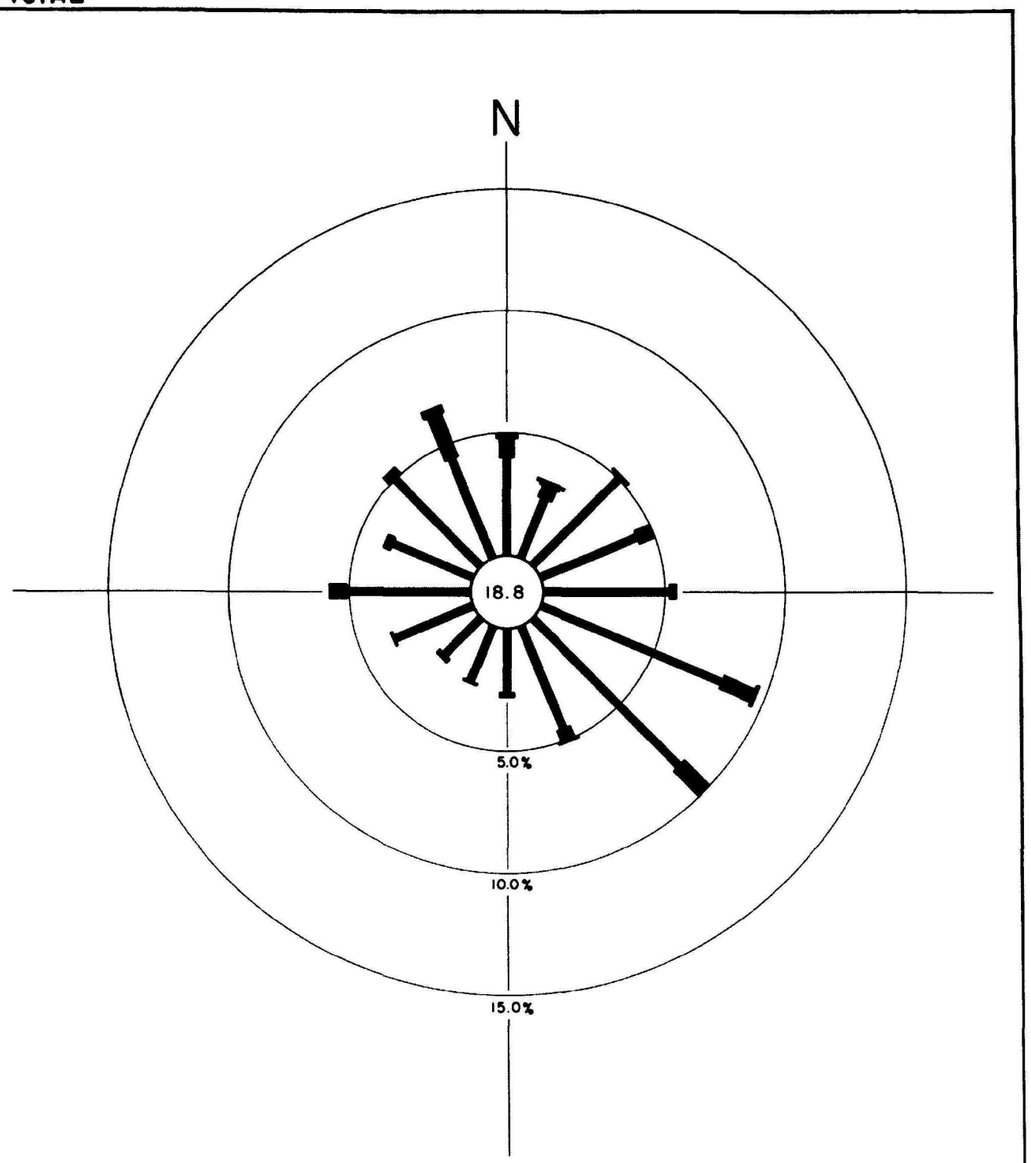


JUNE , JULY & AUGUST



DECEMBER , JANUARY & FEBRUARY

NOTES

1. OBSERVED AT LOCKHEED AIR TERMINAL, BURBANK, CALIFORNIA
2. TOTAL NUMBER OF OBSERVATIONS (JUNE, JULY & AUGUST) 2658
3. TOTAL NUMBER OF OBSERVATIONS (DECEMBER, JANUARY & FEBUARY) 2713
4. STATION ELEVATION (GROUND) 213 METERS

WIND SPEED SCALE

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

1000 METER
WIND ROSE - BURBANK, CALIFORNIA

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO.
	DATE JAN 30, 1959	9

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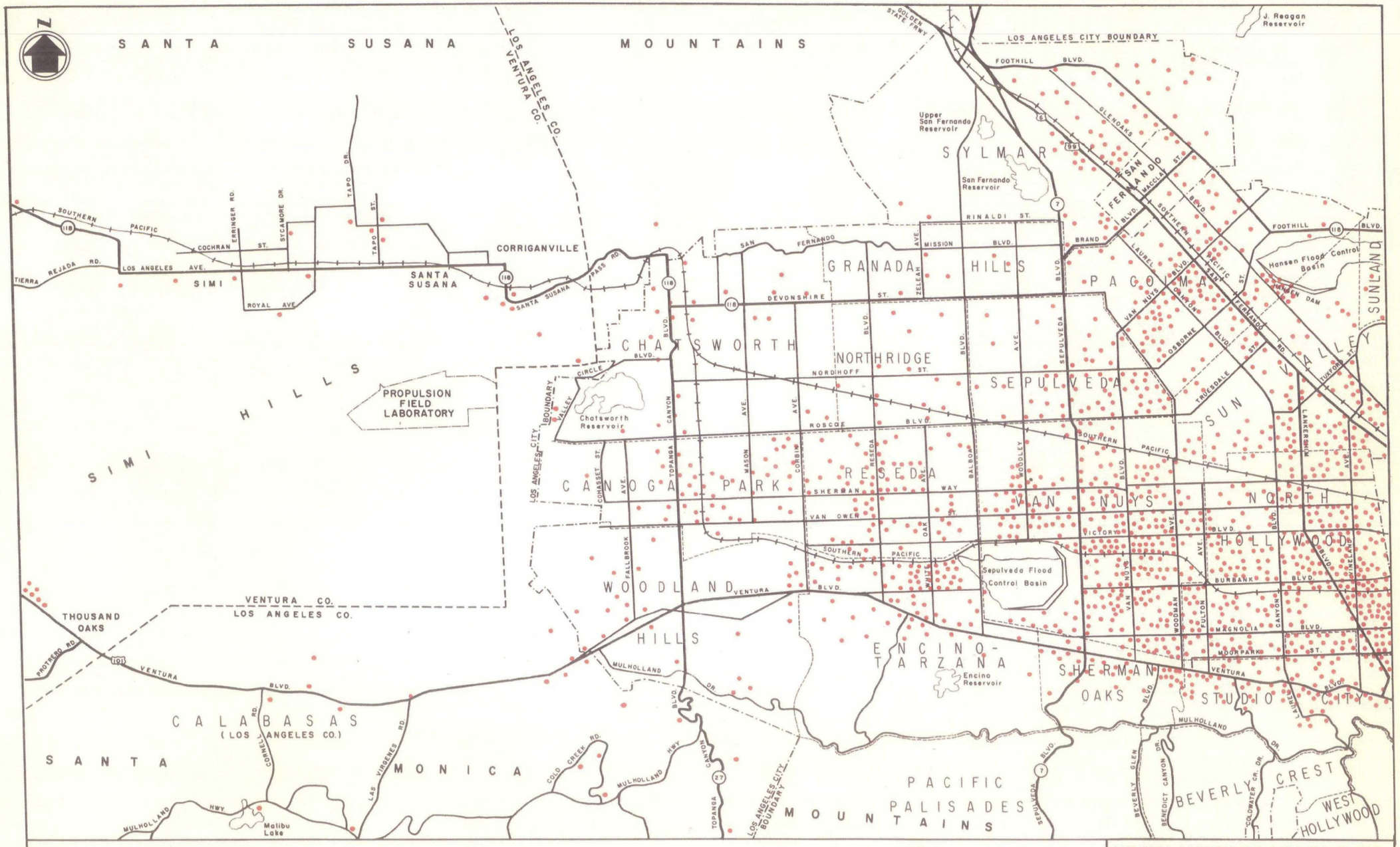
~~COMPANY OFFICIAL~~



NOTES:

0 1 2 3 4 5 MILES

0 5000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- FEDERAL ROUTE (6)
- STATE ROUTE (7)
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- COMMUNITY BOUNDARY
- FACILITY BOUNDARY
- EACH DOT REPRESENTS 200 PERSONS

How many Date 7

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

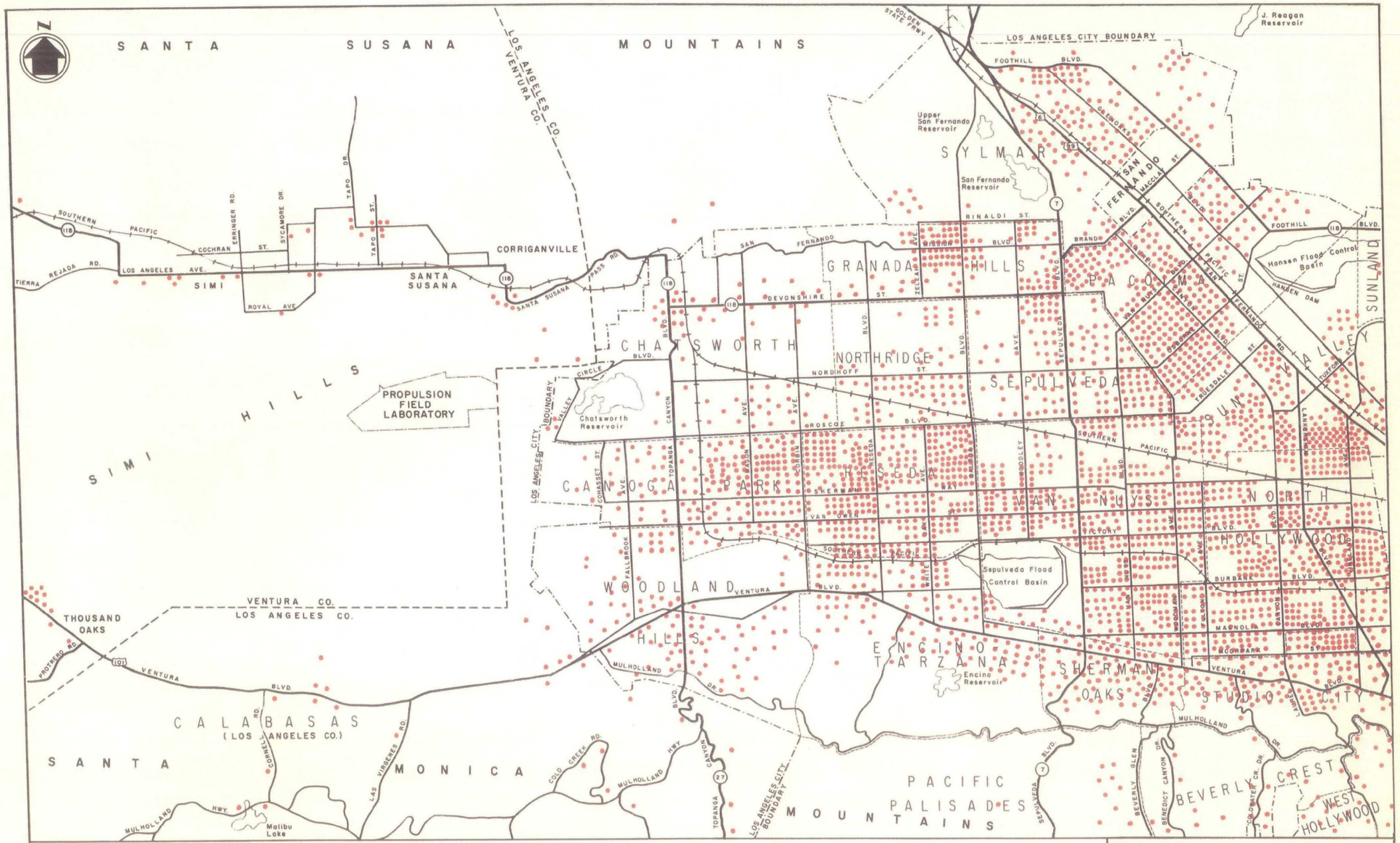
POPULATION DENSITY MAP
YEAR - 1950

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO.
	DATE JAN. 30 1959	10

~~COMPANY OFFICIAL~~

HDMSm0000001485

~~COMPANY OFFICIAL~~



NOTES:

0 1 2 3 4 5 MILES

0 5000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- FEDERAL ROUTE
- STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- COMMUNITY BOUNDARY
- FACILITY BOUNDARY
- EACH DOT REPRESENTS 200 PERSONS

Rev May 27 Date

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

POPULATION DENSITY MAP
YEAR - 1957

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO.
	DATE JAN. 30 1959	11

~~COMPANY OFFICIAL~~

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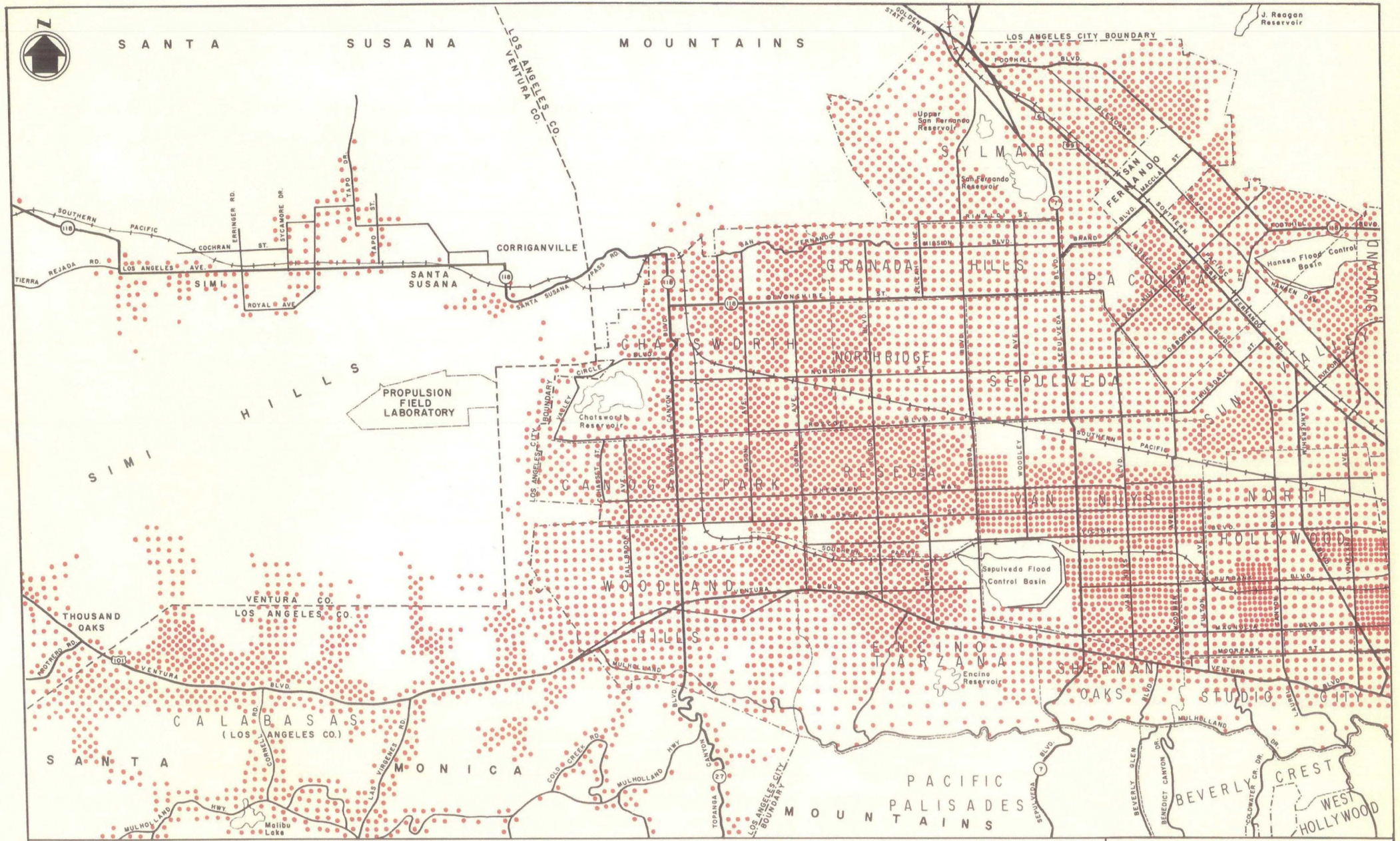
~~COMPANY OFFICIAL~~



NOTES:

0 1 2 3 4 5 MILES

0 5000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- FEDERAL ROUTE (6)
- STATE ROUTE (7)
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- COMMUNITY BOUNDARY
- FACILITY BOUNDARY
- EACH DOT REPRESENTS 200 PERSONS

How many dots?

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

POPULATION DENSITY MAP
YEAR - 1980

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

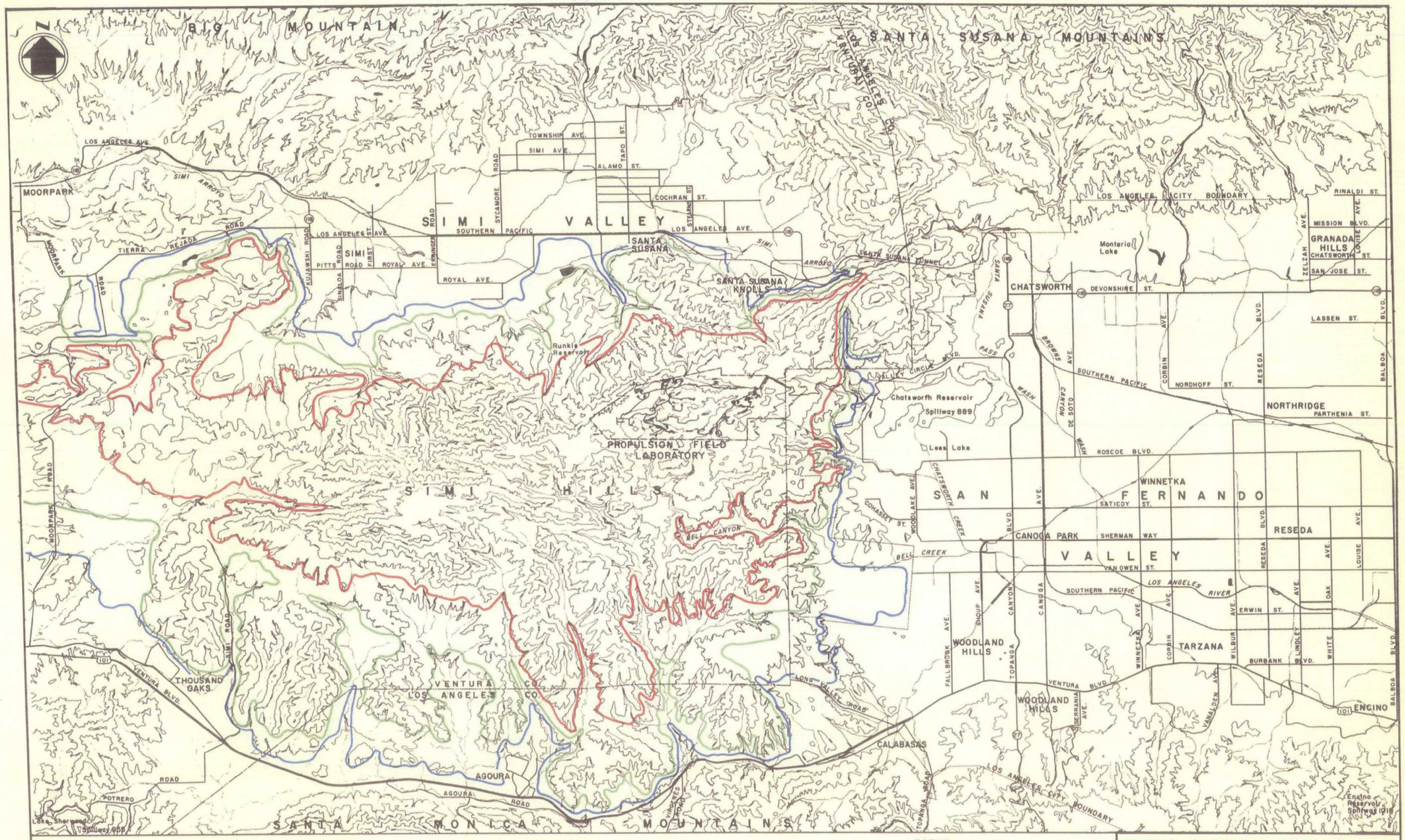
DATE JAN. 30 1959

DRAWING NO. 12

~~COMPANY OFFICIAL~~

HDMSm0000000150

COMPANY OFFICIAL



NOTES:

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY
- YEAR 1960
- YEAR 1970
- YEAR 1980

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

POPULATION ENCROACHMENT LIMITS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE JAN. 30 1959

DRAWING NO. 13

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HDMSm000000151

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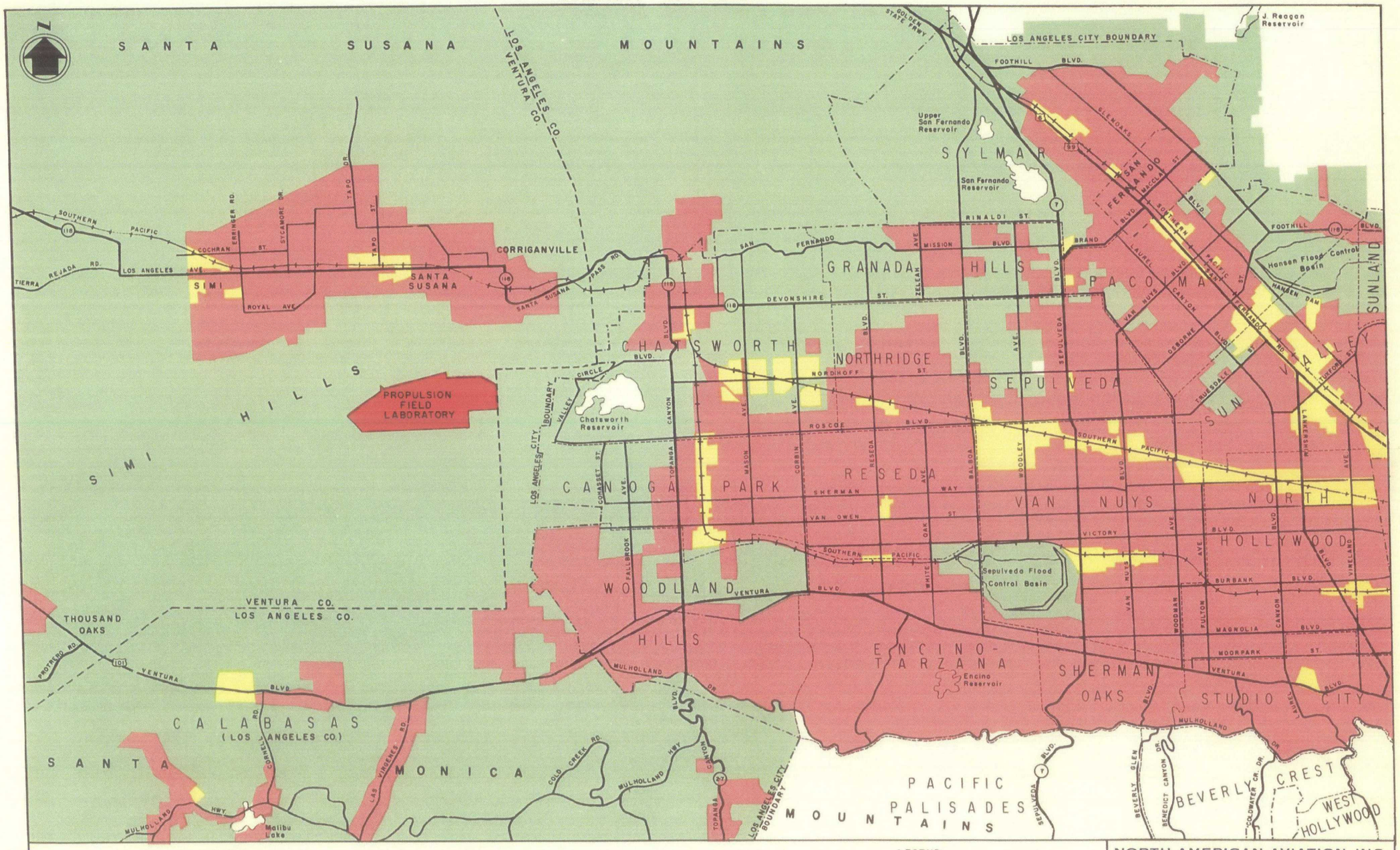


NOTES:

0 1 2 3 4 5 MILES

0 5000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- FEDERAL ROUTE (6)
- STATE ROUTE (7)
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- COMMUNITY BOUNDARY
- FACILITY BOUNDARY
- AGRICULTURAL ZONING
- INDUSTRIAL ZONING
- RESIDENTIAL ZONING
- PROPULSION FIELD LABORATORY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ZONING MAP
PRESENT – 1957

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

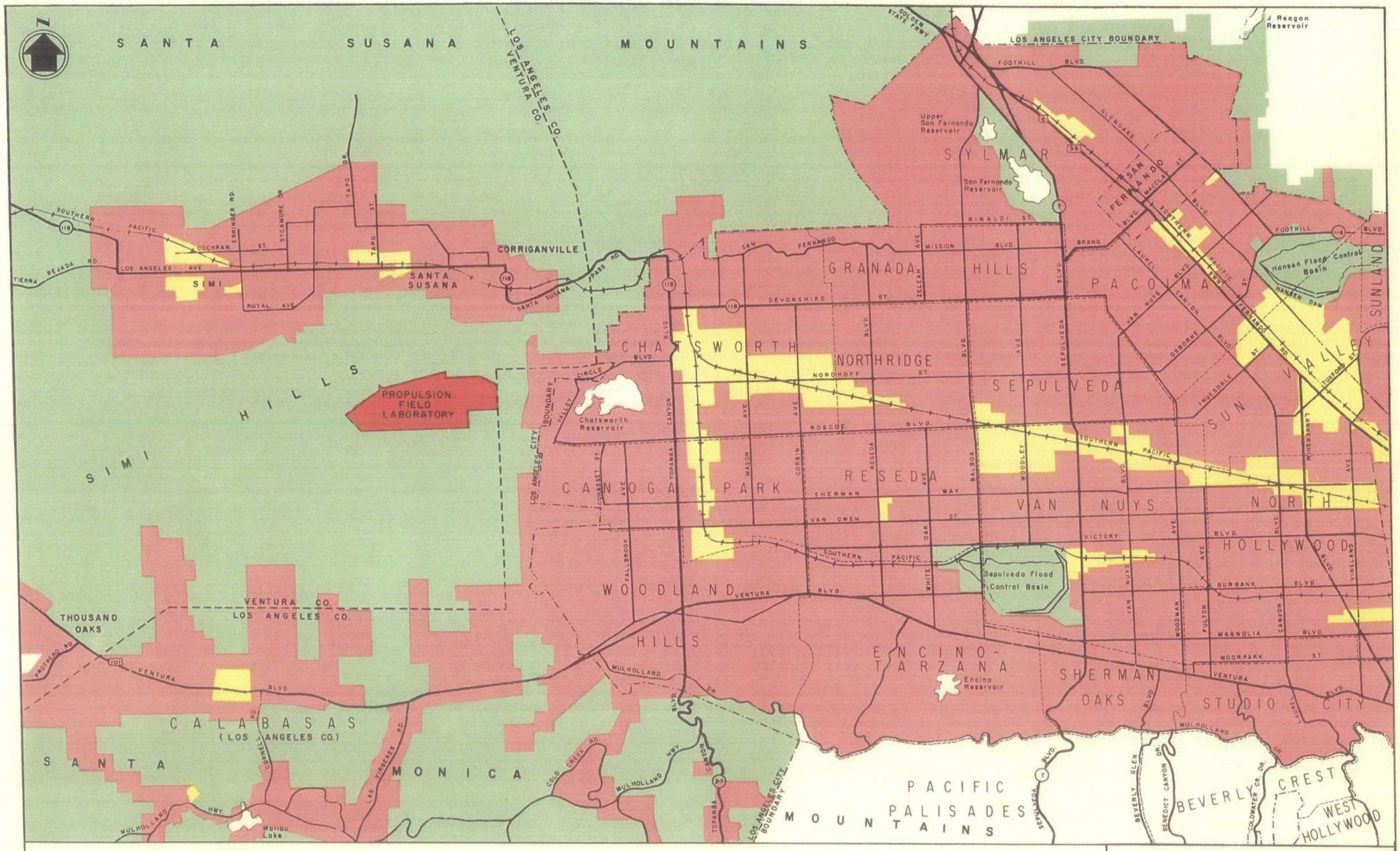
DATE JAN. 30, 1959

DRAWING NO. 14

COMPANY OFFICIAL

HDMSm0000001521

COMPANY OFFICIAL



NOTES:

0 1 2 3 4 5 MILES

GRAPHIC SCALES

0 5000 10,000 15,000 20,000 FEET

LEGEND

- ROADS
- FEDERAL ROUTE
- STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- COMMUNITY BOUNDARY
- FACILITY BOUNDARY
- AGRICULTURAL ZONING
- INDUSTRIAL ZONING
- RESIDENTIAL ZONING
- PROPULSION FIELD LABORATORY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ZONING MAP
FUTURE – 1980

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

DATE JAN. 30, 1959

DRAWING NO. 15

COMPANY OFFICIAL

HDMSm00000153

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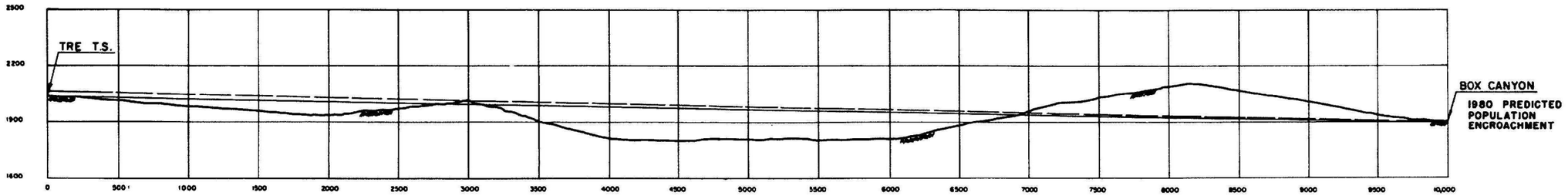
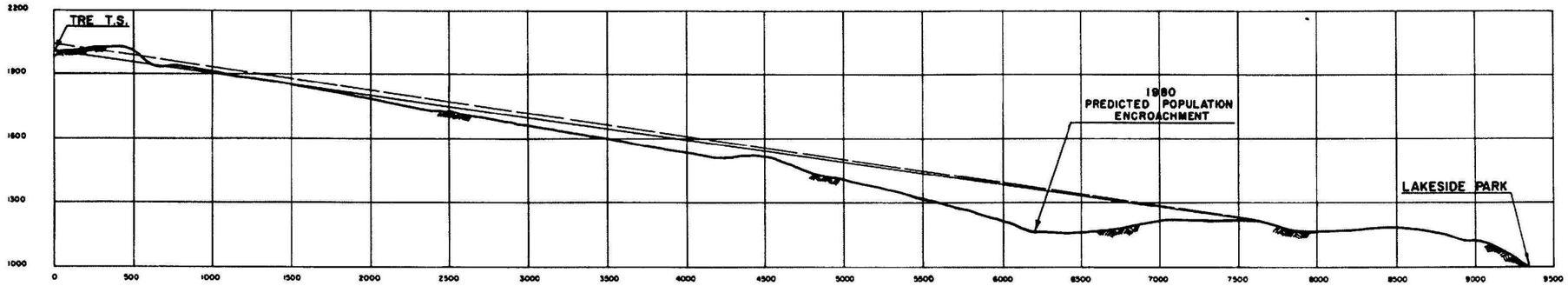
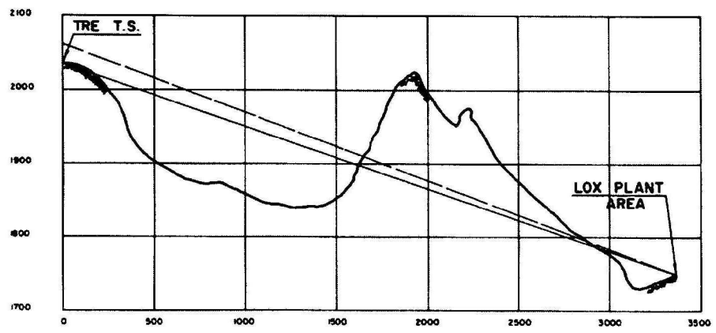


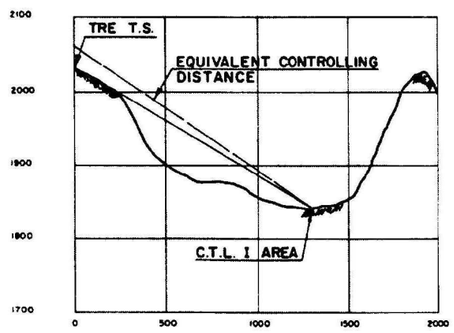
TRE TEST STAND TO BOX CANYON



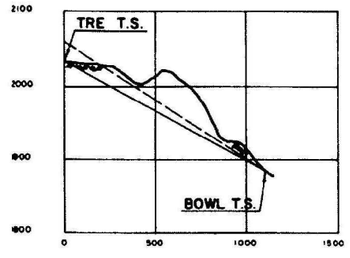
TRE TEST STAND TO LAKESIDE PARK



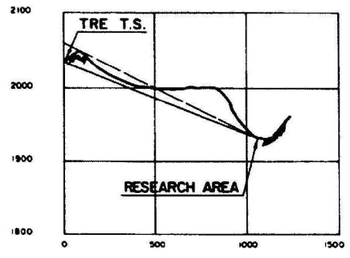
TRE TEST STAND TO LOX PLANT AREA



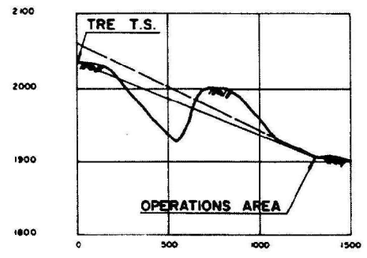
TRE TEST STAND TO CTL I AREA



TRE TEST STAND TO BOWL TEST STAND



TRE TEST STAND TO RESEARCH AREA



TRE TEST STAND TO OPERATIONS AREA

LEGEND

NATURAL GRADE

EXPLOSION ABOVE GRADE

GRADE LEVEL EXPLOSION

GRAPHIC SCALES

1" = 100' VERTICAL

1" = 300' VERTICAL

1" = 400' HORIZONTAL

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TERRAIN CROSS-SECTIONS
TRE AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

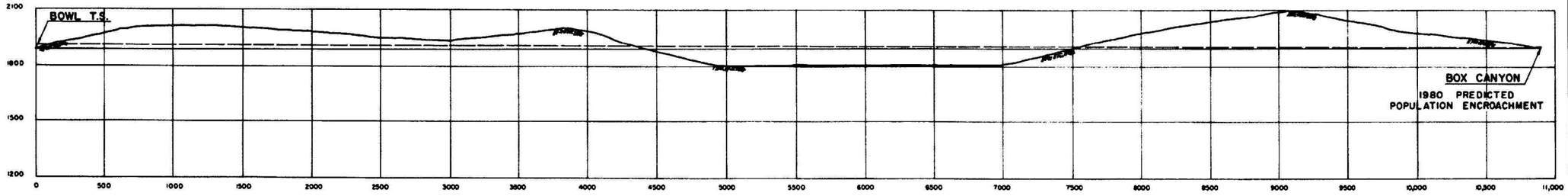
SCALE AS NOTED
DATE JAN 30, 1959

DRAWING NO. 16

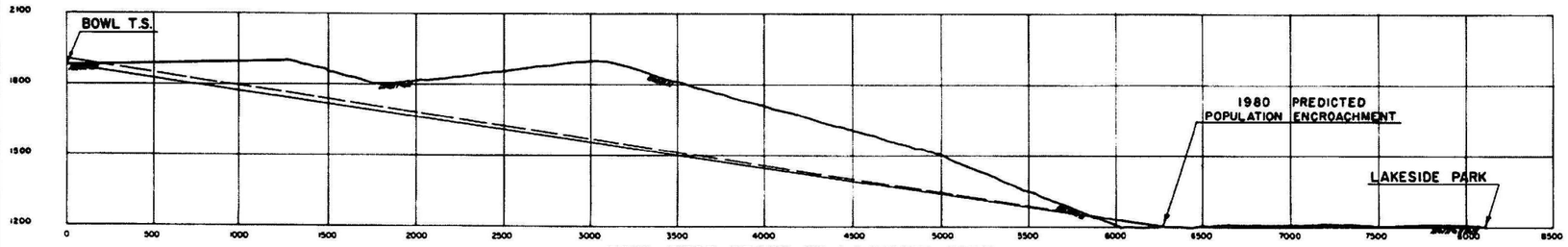
~~COMPANY OFFICIAL~~

HDMSm000000154

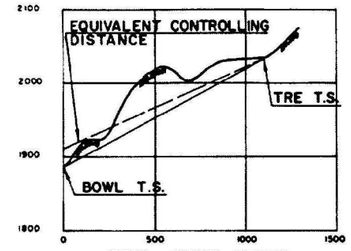
~~COMPANY OFFICIAL~~



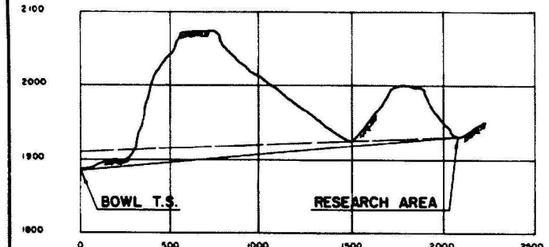
BOWL TEST STAND TO BOX CANYON



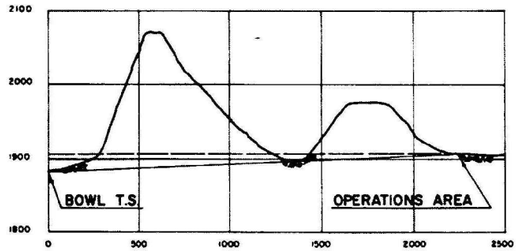
BOWL TEST STAND TO LAKESIDE PARK



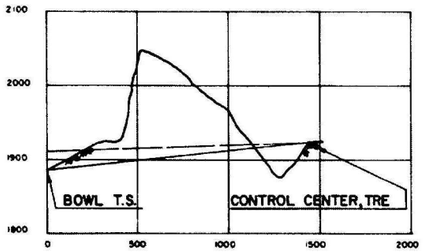
BOWL TEST STAND
TO TRE TEST STAND



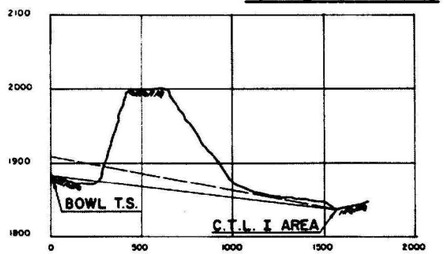
BOWL TEST STAND TO RESEARCH AREA



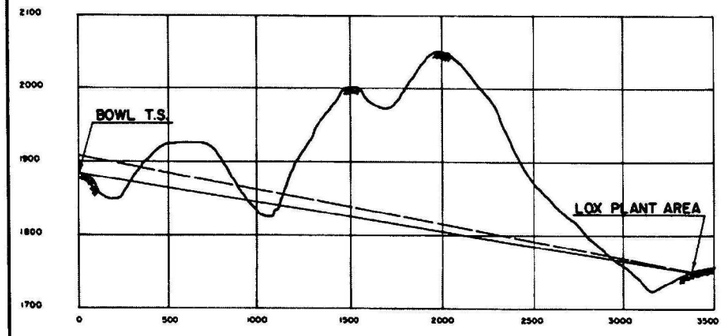
BOWL TEST STAND TO OPERATIONS AREA



BOWL TEST STAND TO CONTROL CENTER, TRE



BOWL TEST STAND TO CTL I AREA



BOWL TEST STAND TO LOX PLANT AREA

LEGEND

NATURAL GRADE

EXPLOSION ABOVE GRADE

GRADE LEVEL EXPLOSION

GRAPHIC SCALES

100 0 100 200 FT
1" = 100' VERTICAL

300 0 300 600 FT
1" = 300' VERTICAL

400 0 400 800 FT
1" = 400' HORIZONTAL

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

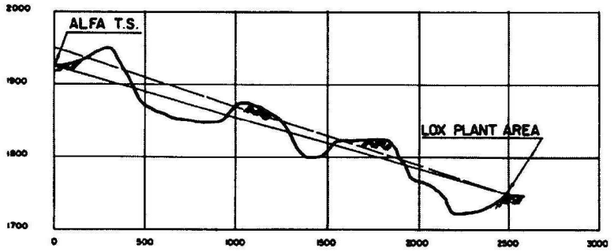
TERRAIN CROSS-SECTIONS
BOWL AREA

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO.
	DATE JAN 30, 1959	17

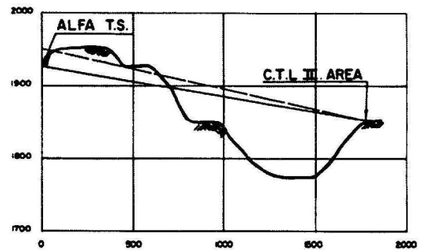
~~COMPANY OFFICIAL~~

HDMSm0000001555

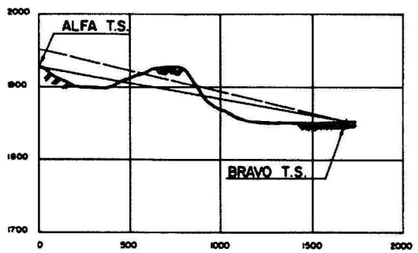
~~COMPANY OFFICIAL~~



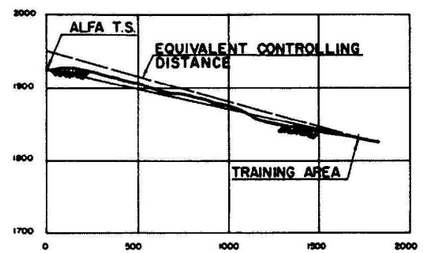
ALFA TEST STAND TO LOX PLANT AREA



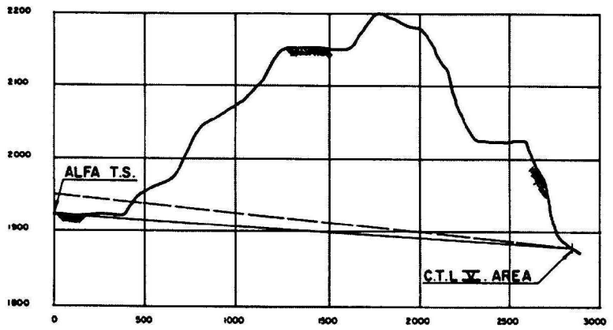
ALFA TEST STAND TO C.T.L II. AREA



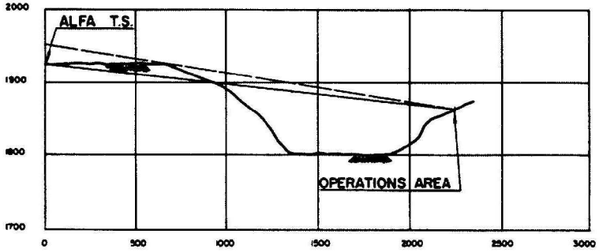
ALFA TEST STAND TO BRAVO TEST STAND



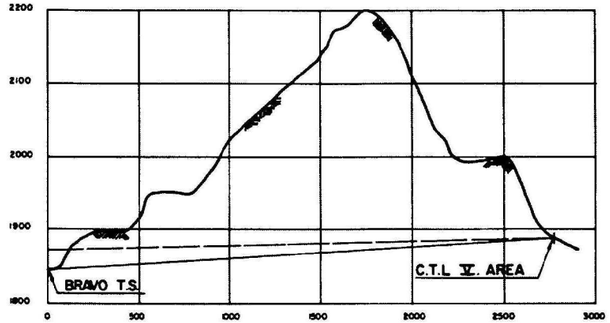
ALFA TEST STAND TO TRAINING AREA



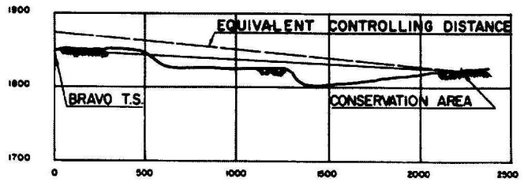
ALFA TEST STAND TO C.T.L V AREA



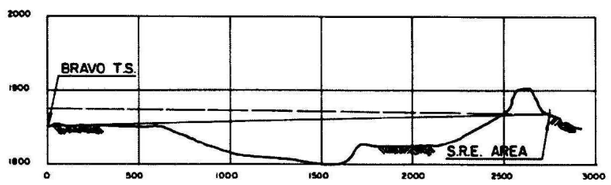
ALFA TEST STAND TO OPERATIONS AREA



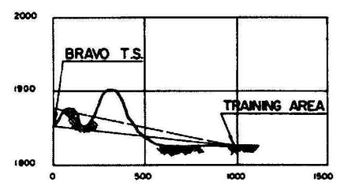
BRAVO TEST STAND TO C.T.L. V. AREA



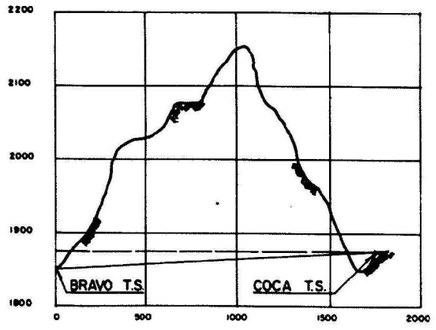
BRAVO TEST STAND TO CONSERVATION AREA



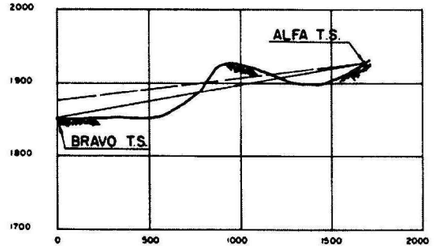
BRAVO TEST STAND TO S.R.E AREA



BRAVO TEST STAND TO TRAINING AREA



BRAVO TEST STAND TO COCA TEST STAND



BRAVO TEST STAND TO ALFA TEST STAND

LEGEND

NATURAL GRADE

EXPLOSION ABOVE GRADE

GRADE LEVEL EXPLOSION

GRAPHIC SCALES

100 0 100 200 FT

1" = 100' VERTICAL

400 0 400 800 FT

1" = 400' HORIZONTAL

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TERRAIN CROSS-SECTIONS
ALFA AND BRAVO AREAS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

DATE JAN 30,1959

DRAWING NO. 18

~~COMPANY OFFICIAL~~

HDMSm00000156

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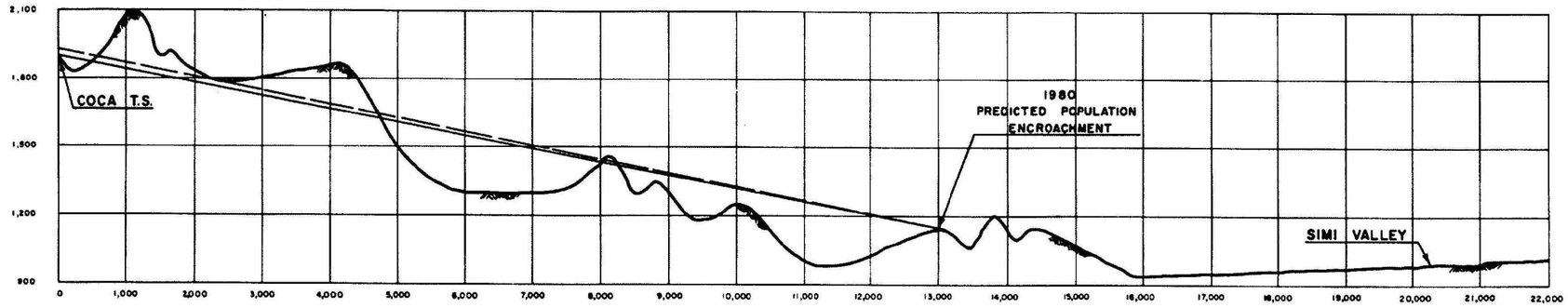
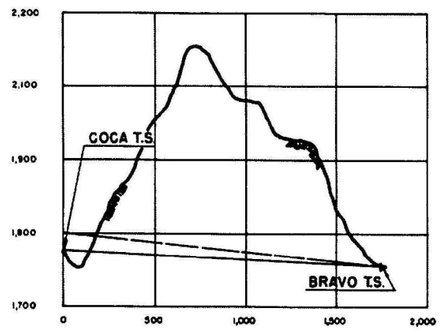
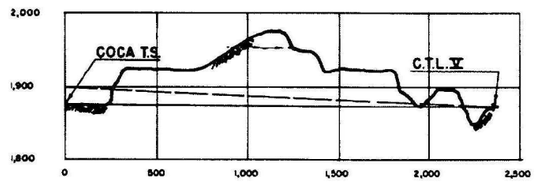


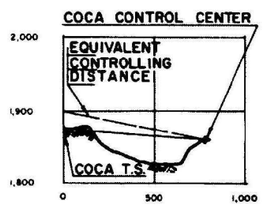
COCA TEST STAND TO SIMI VALLEY



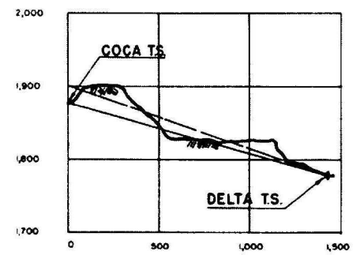
COCA TEST STAND TO BRAVO TEST STAND



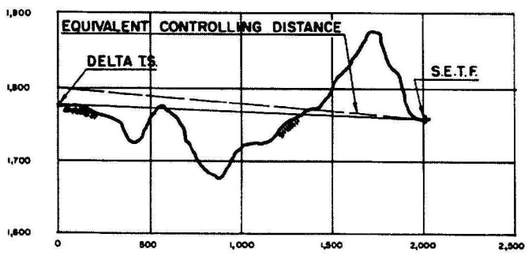
COCA TEST STAND TO C.T.L. V. AREA



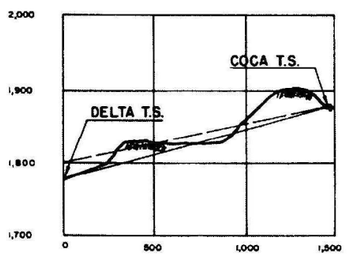
COCA TEST STAND TO
COCA CONTROL CENTER



COCA TEST STAND TO
DELTA TEST STAND



DELTA TEST STAND TO S.E.T.F. AREA



DELTA TEST STAND TO COCA TEST STAND

LEGEND

NATURAL GRADE

EXPLOSION ABOVE GRADE

GRADE LEVEL EXPLOSION

GRAPHIC SCALES

100 0 100 200 FT
1" = 100' VERTICAL

300 0 300 600 FT
1" = 300' VERTICAL

400 0 400 800 FT
1" = 400' HORIZONTAL

1,000 0 1,000 2,000 FT
1" = 1,000' HORIZONTAL

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TERRAIN CROSS-SECTIONS
COCA AND DELTA AREAS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

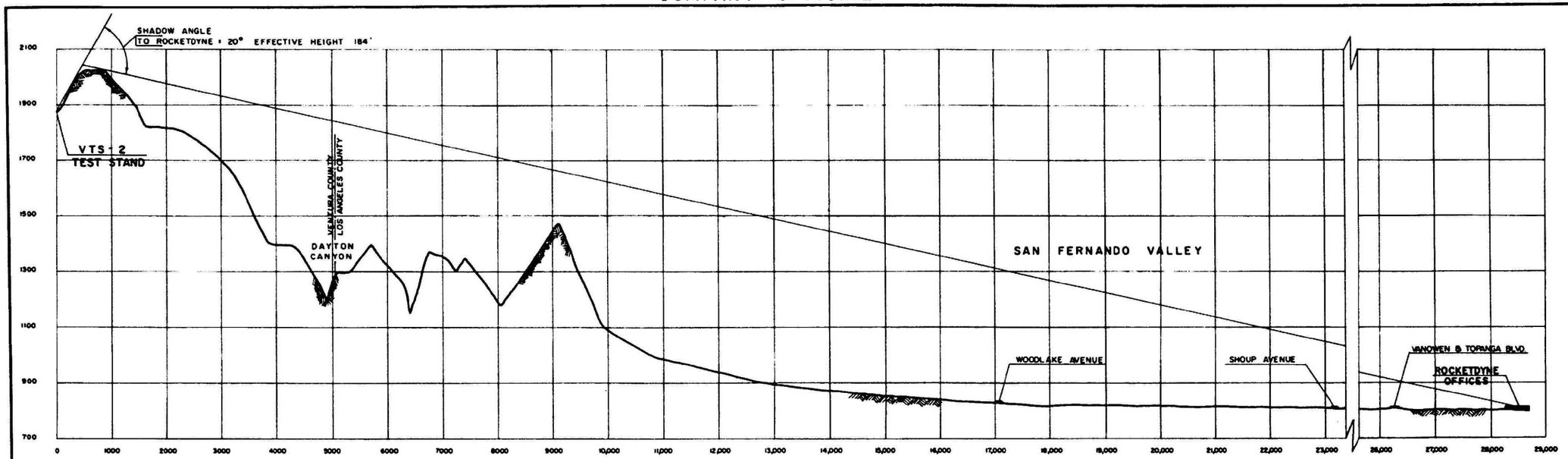
DATE JAN 30, 1959

DRAWING NO. 19

~~COMPANY OFFICIAL~~

HDMSm00000157

~~COMPANY OFFICIAL~~

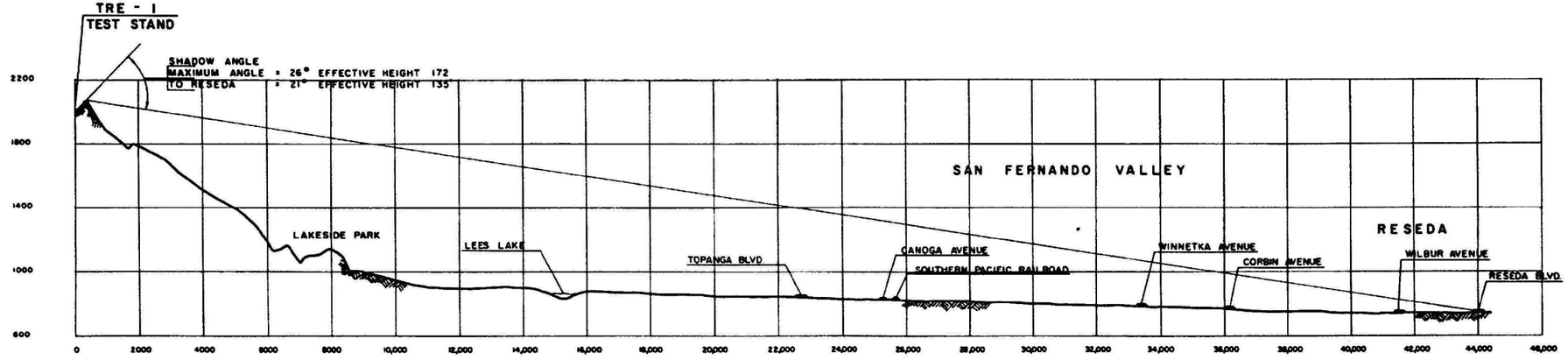


VTS - 2 TEST STAND TO CANOGA PARK

GRAPHIC SCALES

1" = 1,000' HORIZONTAL 1,000 0 1,000 2,000 3,000 FT.

1" = 200' VERTICAL 200 0 200 400 600 FT.



TRE - 1 TEST STAND TO RESEDA

GRAPHIC SCALES

1" = 2,000' HORIZONTAL 2000 0 2,000 4,000 6,000 FT

1" = 400' VERTICAL 400 0 400 800 1,200 FT.

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

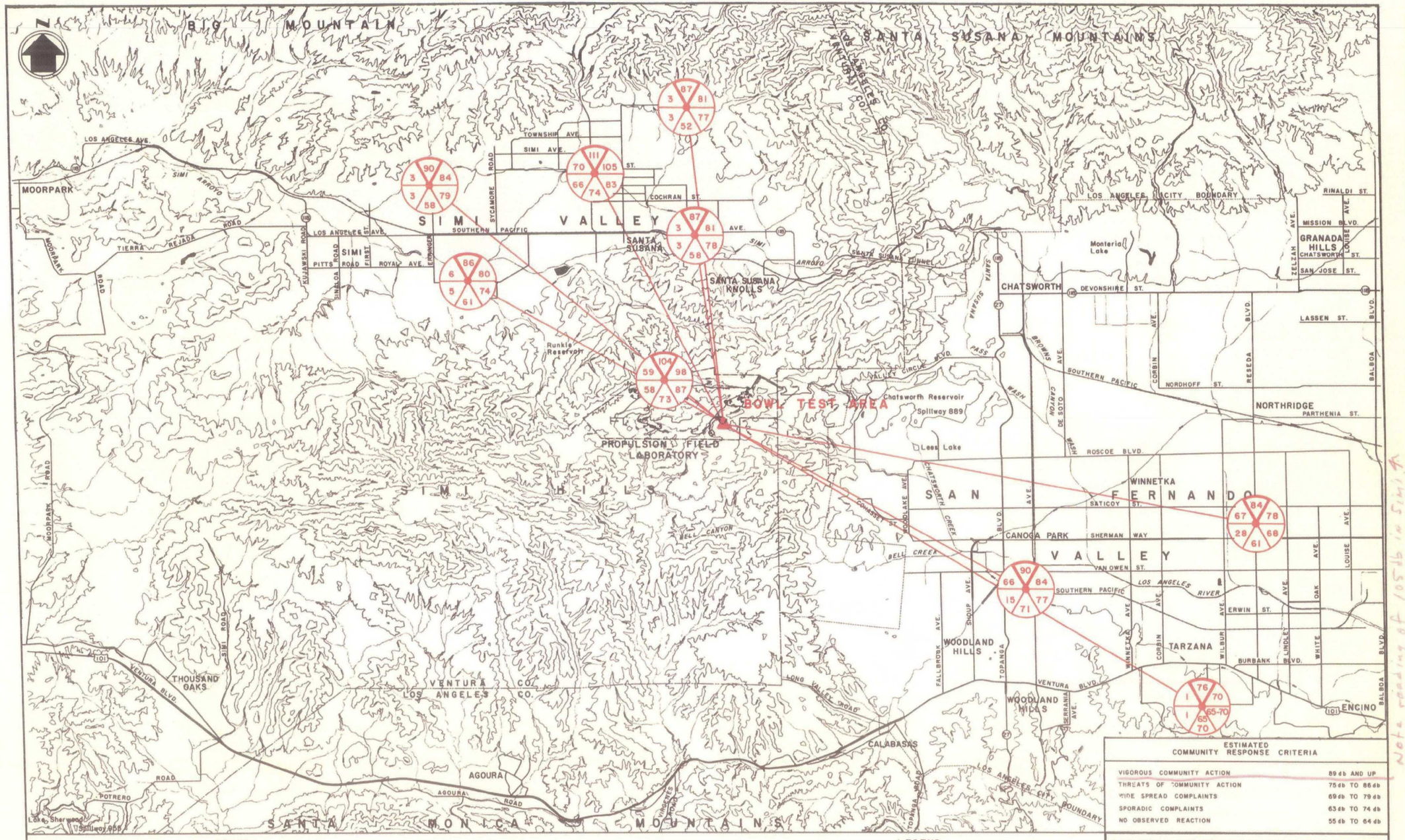
TERRAIN CROSS-SECTIONS
BOWL AND TRE TO SAN FERNANDO VALLEY

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO.
	DATE JAN 30,1959	20

~~COMPANY OFFICIAL~~

HDMSm0000001581

COMPANY OFFICIAL



NOTES:

1. OVERALL SOUND LEVELS ARE FOR A FREQUENCY BAND OF FROM 60 TO 12000 CPS
2. ULTIMATE SOUND LEVELS ARE BASED UPON THRUSTS AS DETERMINED BY CAPACITY OF TEST STANDS.

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL (db) BASED UPON RATED CAPACITY OF TEST STAND (660 K)
LOCATION AT OBSERVATION POINT
TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN
MAXIMUM RECORDED SOUND LEVEL AT 240 MPS (db)
NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE
AVERAGE SOUND LEVEL FOR AUDIBLE READINGS (db)
AVERAGE BACKGROUND SOUND LEVEL (db)

ESTIMATED COMMUNITY RESPONSE CRITERIA

VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ULTIMATE AND RECORDED SOUND LEVELS
BOWL TEST AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE JAN. 30 1959

DRAWING NO. 21

Note reading of 105 db in Simi

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HDMSm0000001599

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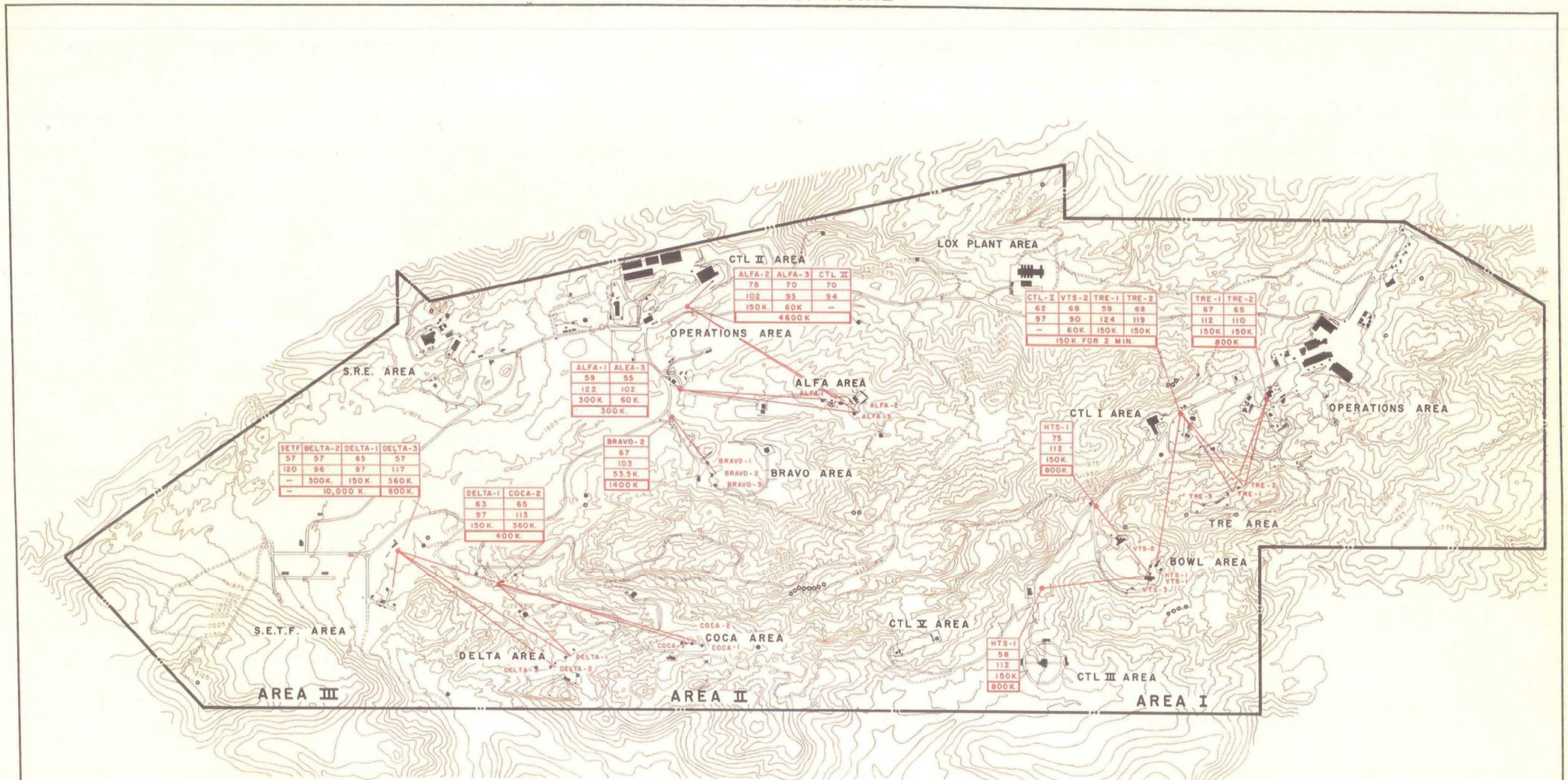

0 1/4 1/2 MILE

0 600 1200 1800 2400 FEET

GRAPHIC SCALES

SETF	DELTA-2	COCA-3	
57	57	57	– NOISE SOURCE
120	96	117	– MEASURED BACKGROUND (db)
–	300K.	360K.	– MEASURED SOUND LEVEL OF SOURCE (db)
–	800 K.		– THRUST LEVEL IN KIPS
			– MAXIMUM THRUST BASED UPON HIGHEST SOUND LEVEL AND THE UNPROTECTED EAR
			– OBSERVATION POINT

LEGEND
- STRUCTURES
- WATER TANK
- WATER WELL
- ROADS
- 2100 TOPOGRAPHY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

PRESENT AND FUTURE ON SITE SOUND LEVELS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE JAN. 30 1959

DRAWING NO. 22

COMPANY OFFICIAL

HDMSm00000160

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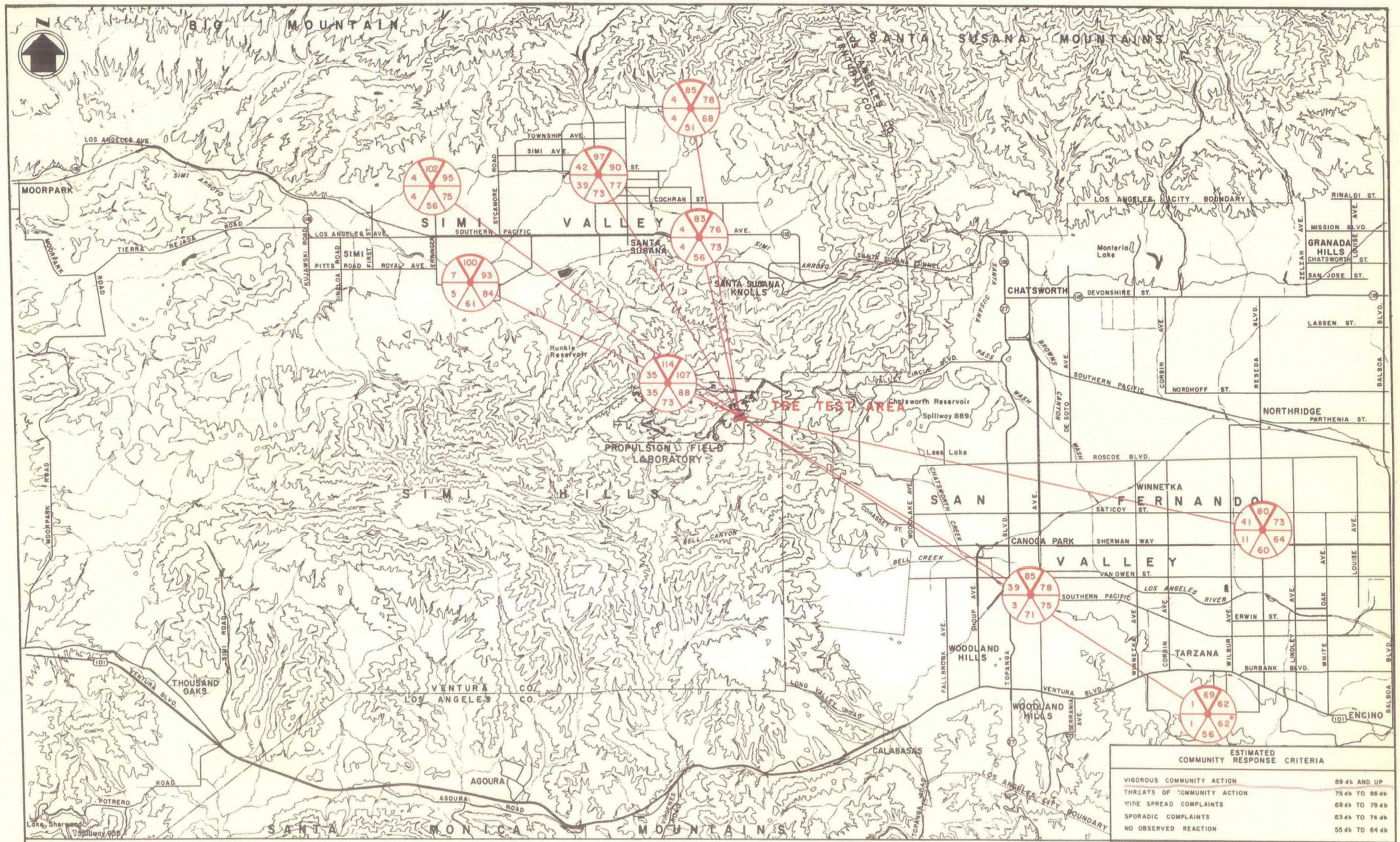

ESTIMATED COMMUNITY RESPONSE CRITERIA	
VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NOTES:

1. OVERALL SOUND LEVELS ARE FOR A FREQUENCY BAND OF FROM 60 TO 12000 CPS
2. ULTIMATE SOUND LEVELS ARE BASED UPON THRUSTS AS DETERMINED BY CAPACITY OF TEST STANDS.
3. * THIS READING FOR TRE-2, ALL OTHERS FOR TRE-1

GRAPHIC SCALES

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL (db) BASED UPON RATED CAPACITY OF TEST STAND (500K#)
LOCATION AT OBSERVATION POINT
TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN
MAXIMUM RECORDED SOUND LEVEL AT 150 KIPS (db)
NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE
AVERAGE SOUND LEVEL FOR AUDIBLE READINGS (db)
AVERAGE BACKGROUND SOUND LEVEL (db)

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ULTIMATE AND RECORDED SOUND LEVELS
TRE TEST AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED
DATE JAN. 30 1959
DRAWING NO. 23

COMPANY OFFICIAL

HDMSm00000161

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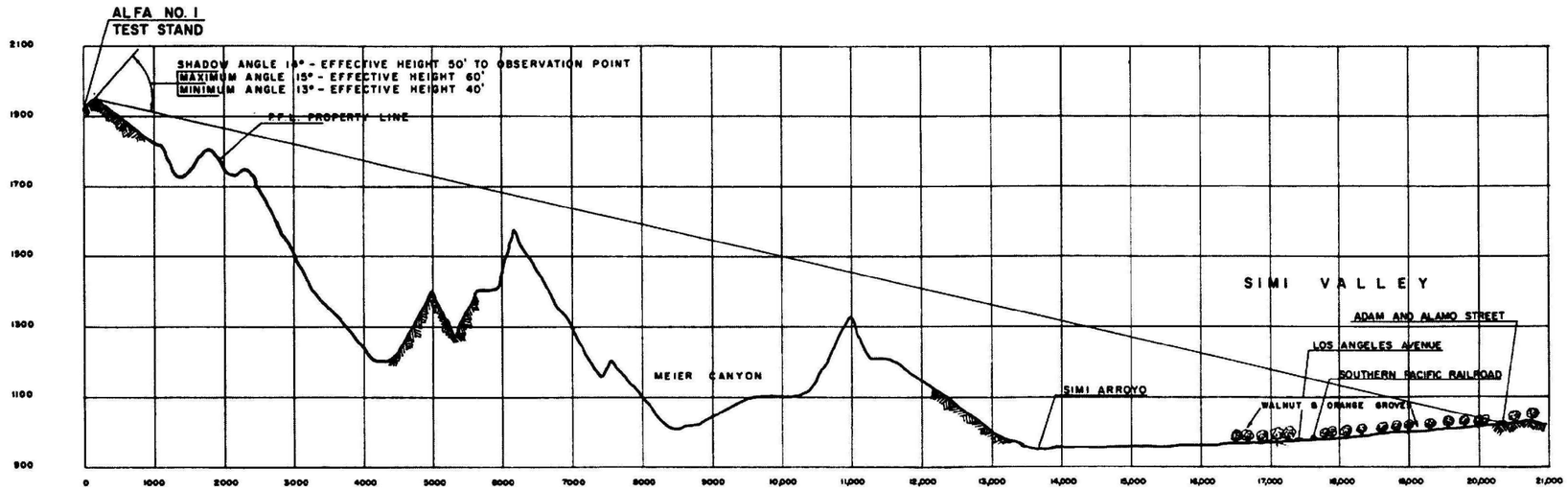
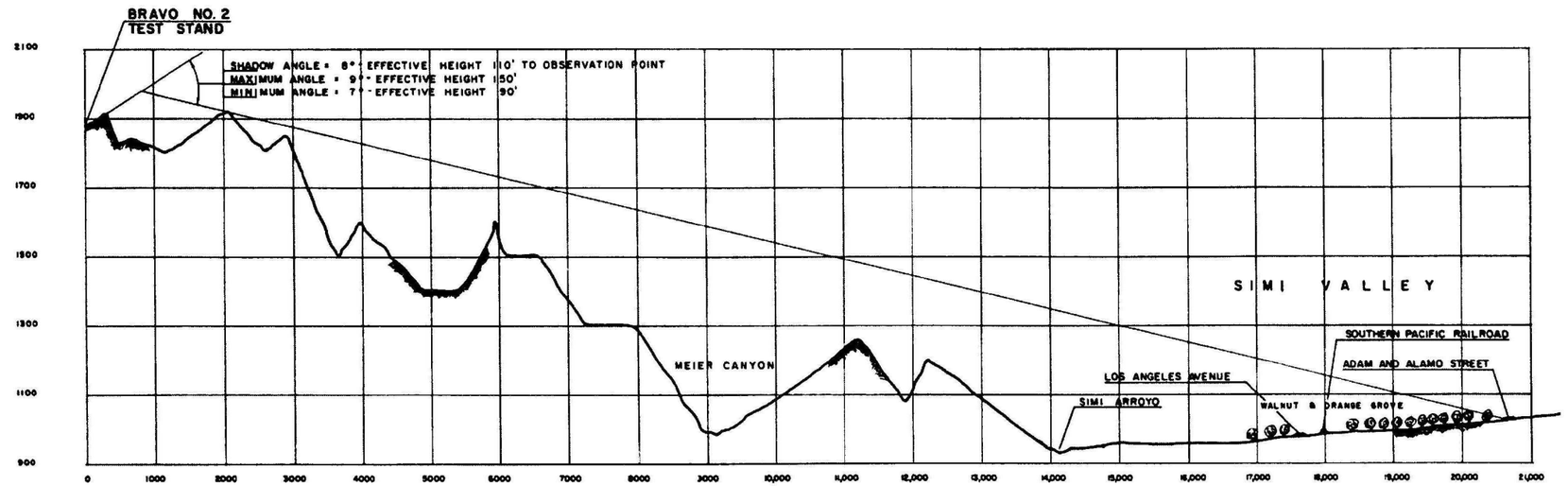


ALFA NO. 1 TEST STAND TO SIMI VALLEY

GRAPHIC SCALES

1" = 1,000' HORIZONTAL 1,000 0 1,000 2,000 3,000 FT.

1" = 200' VERTICAL 200 0 200 400 600 FT.



BRAVO NO. 1 TEST STAND TO SIMI VALLEY

GRAPHIC SCALES

1" = 1,000' HORIZONTAL 1,000 0 1,000 2,000 3,000 FT.

1" = 200' VERTICAL 200 0 200 400 600 FT.

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TERRAIN CROSS-SECTIONS
ALFA AND BRAVO TO SIMI VALLEY

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

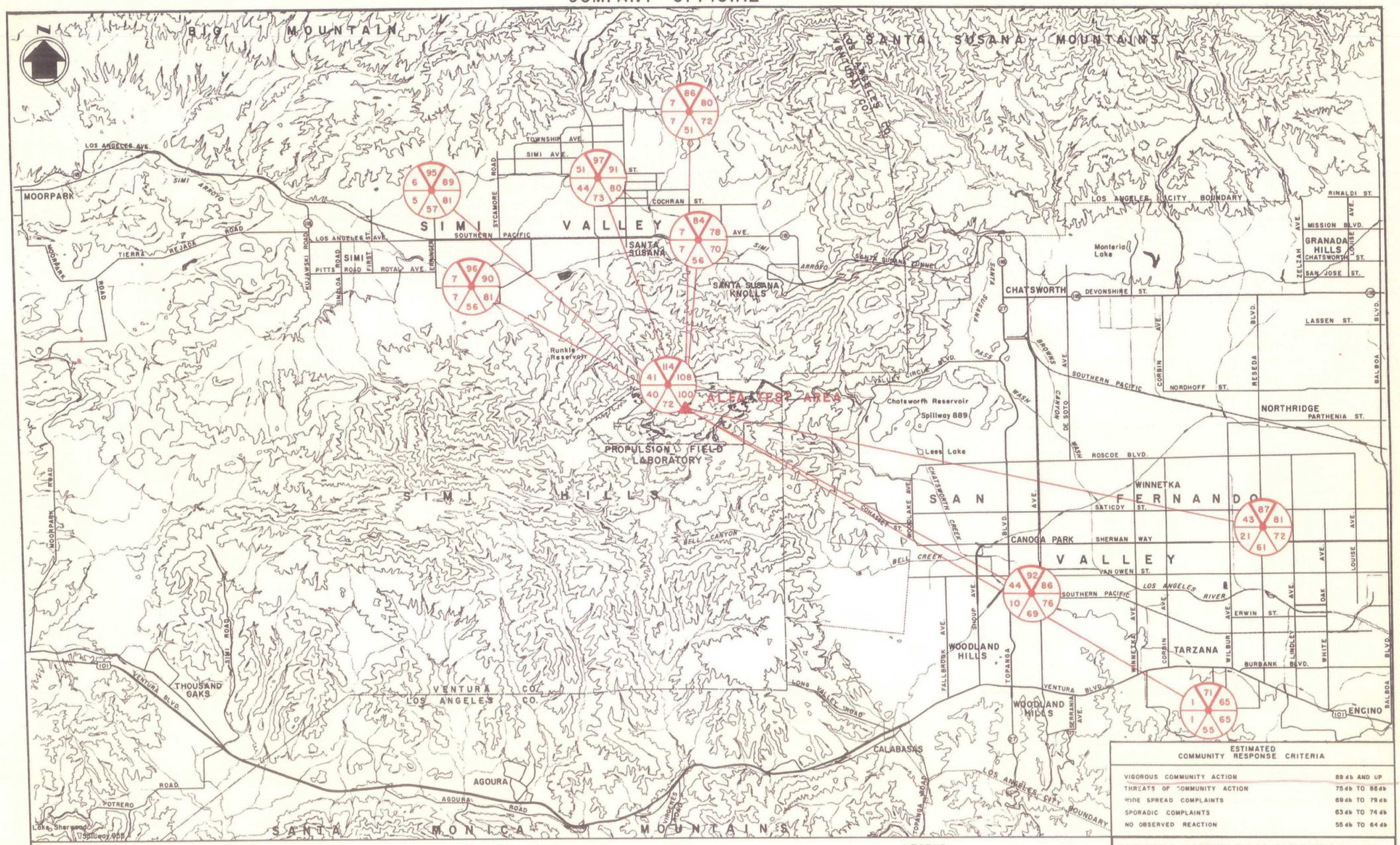
DATE JAN 30, 1959

DRAWING NO. 24

~~COMPANY OFFICIAL~~

HDMSm000000162

COMPANY OFFICIAL



ESTIMATED COMMUNITY RESPONSE CRITERIA	
VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NOTES:

1. OVERALL SOUND LEVELS ARE FOR A FREQUENCY BAND OF FROM 60 TO 12000 CPS
2. ULTIMATE SOUND LEVELS ARE BASED UPON THRUSTS AS DETERMINED BY CAPACITY OF TEST STANDS.

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL (db) BASED UPON RATED CAPACITY OF TEST STAND (1000 K)

TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN

NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE

LOCATION AT OBSERVATION POINT

MAXIMUM RECORDED SOUND LEVEL AT 405 KIPS (db)

AVERAGE SOUND LEVEL FOR AUDIBLE READINGS (db)

AVERAGE BACKGROUND SOUND LEVEL (db)

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

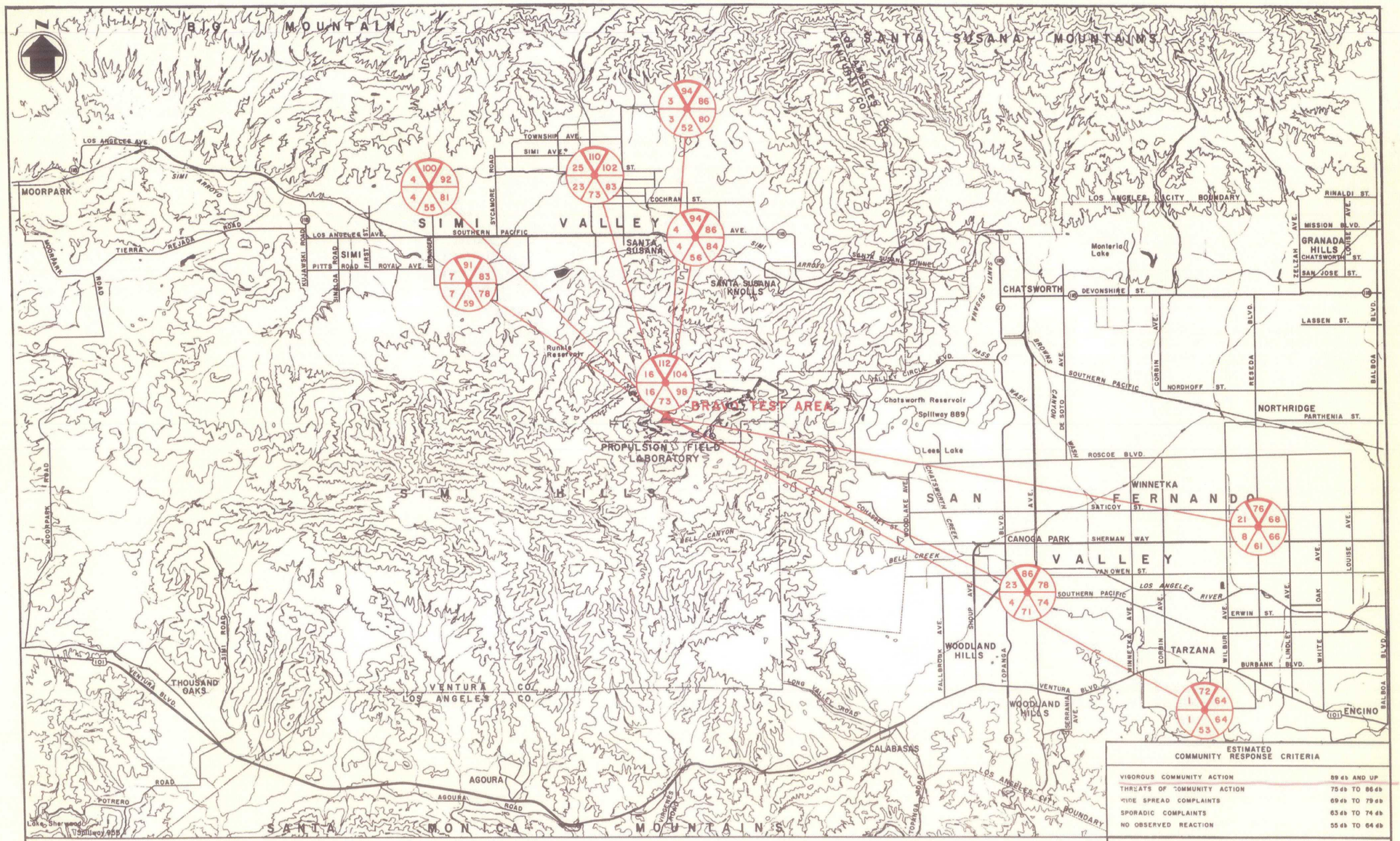
ULTIMATE AND RECORDED SOUND LEVELS
ALFA TEST AREA

THE RALPH M. PARSONS COMPANY ARCHITECT — ENGINEER LOS ANGELES, CALIFORNIA	SCALE AS NOTED	DRAWING NO. 25
	DATE JAN. 30 1959	

COMPANY OFFICIAL

HDMSm0000000163

COMPANY OFFICIAL



ESTIMATED COMMUNITY RESPONSE CRITERIA

VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NOTES:

1. OVERALL SOUND LEVELS ARE FOR A FREQUENCY BAND OF FROM 60 TO 12000 CPS
2. ULTIMATE SOUND LEVELS ARE BASED UPON THRUSTS AS DETERMINED BY CAPACITY OF TEST STANDS.

GRAPHIC SCALES

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

LEGEND

- ROADS
- (101) FEDERAL ROUTE
- (27) STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL (db) BASED UPON RATED CAPACITY OF TEST STAND (1000 K)

LOCATION AT OBSERVATION POINT

TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN

MAXIMUM RECORDED SOUND LEVEL AT 370 KIPS (db)

NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE

AVERAGE SOUND LEVEL FOR AUDIBLE READINGS (db)

AVERAGE BACKGROUND SOUND LEVEL (db)

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ULTIMATE AND RECORDED SOUND LEVELS
BRAVO TEST AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

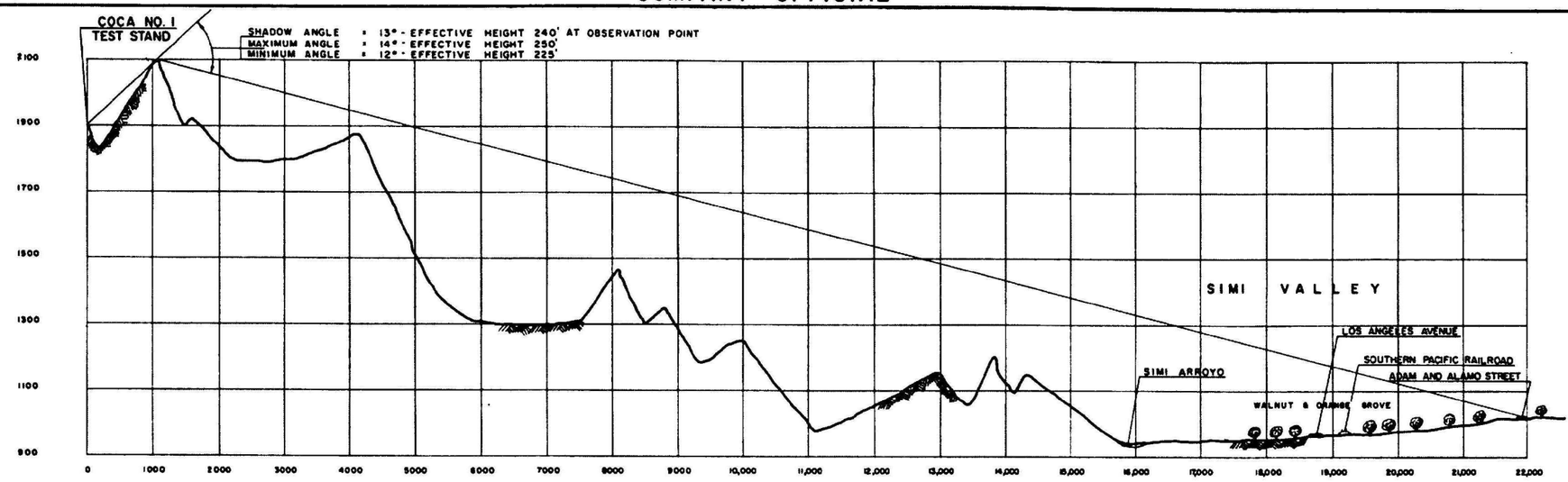
DATE JAN. 30 1959

DRAWING NO. 26

COMPANY OFFICIAL

HDMSm0000001641

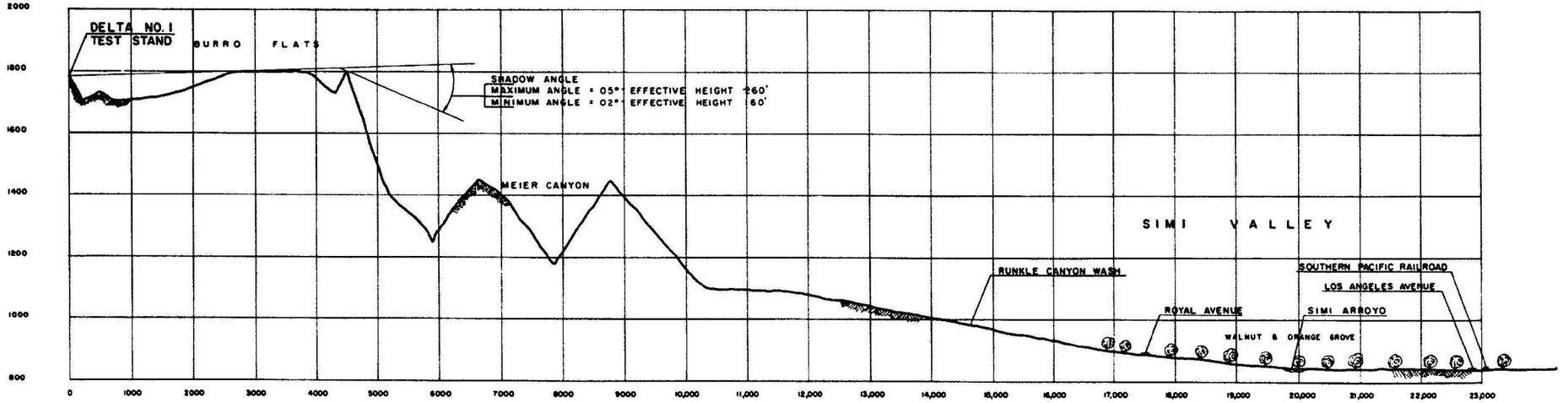
COMPANY OFFICIAL


COCA NO. 1
TEST STAND
SHADOW ANGLE : 13° - EFFECTIVE HEIGHT 240' AT OBSERVATION POINT
MAXIMUM ANGLE : 14° - EFFECTIVE HEIGHT 250'
MINIMUM ANGLE : 12° - EFFECTIVE HEIGHT 225'
2100
1900
1700
1500
1300
1100
900
SIMI VALLEY
LOS ANGELES AVENUE
SOUTHERN PACIFIC RAILROAD
ADAM AND ALAMO STREET
SIMI ARROYO
WALNUT & ORANGE GROVE
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000 11,000 12,000 13,000 14,000 15,000 16,000 17,000 18,000 19,000 20,000 21,000 22,000

COCA NO. 1 TEST STAND TO SIMI VALLEY

1" = 1,000' HORIZONAL 1,000 0 1,000 2,000 3,000 FT.

1" = 200' VERTICAL 200 0 200 400 600 FT.



DELTA NO. 1 TEST STAND TO SIMI VALLEY

1" = 1,000 HORIZONAL 1,000 0 1,000 2,000 3,000 FT

1" = 200 VERTICAL 200 0 200 400 600 FT

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TERRAIN CROSS-SECTIONS
COCA AND DELTA TO SIMI VALLEY

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

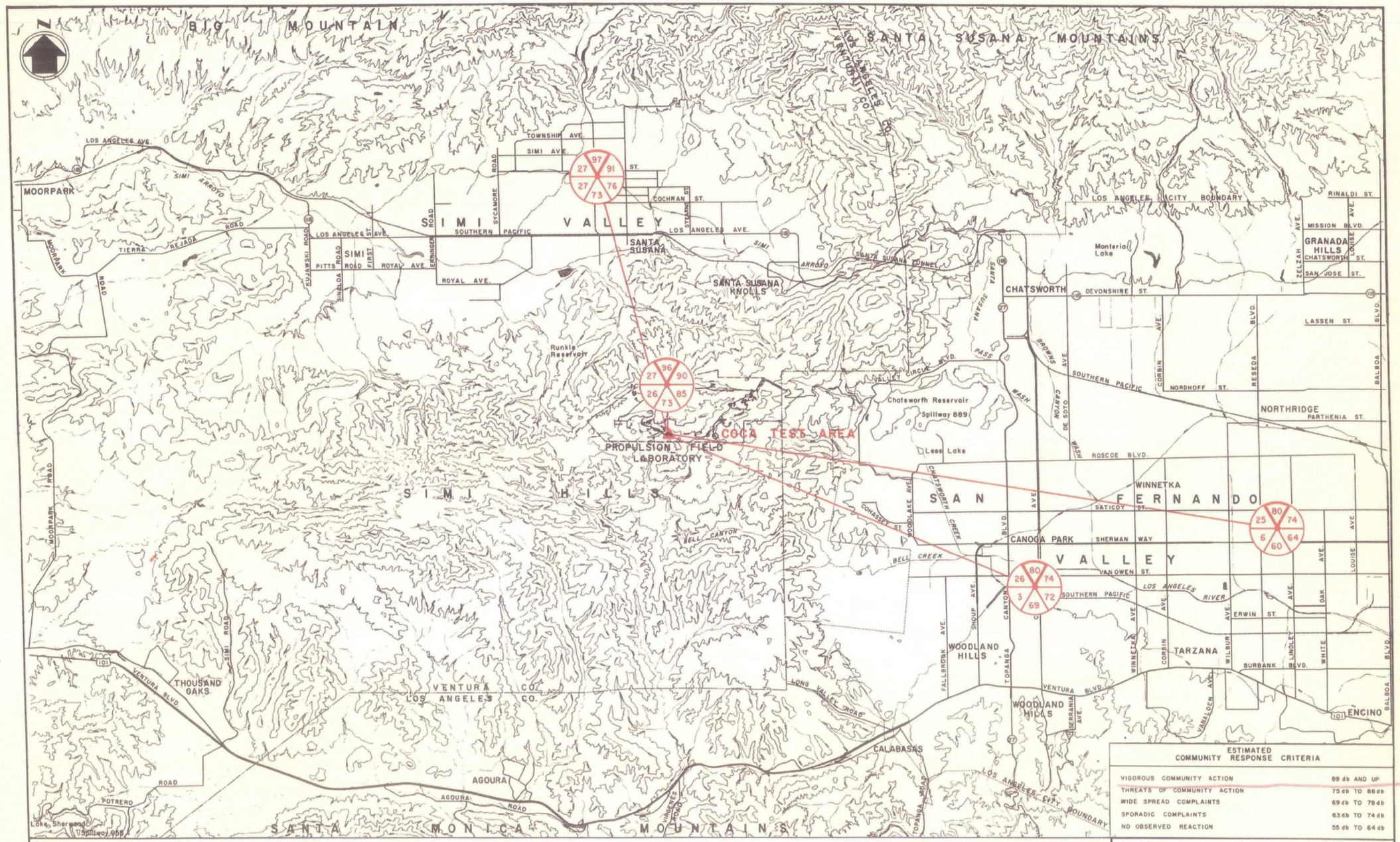
DATE JAN 30,1959

DRAWING NO. 27

COMPANY OFFICIAL

HDMSm0000165

COMPANY OFFICIAL



NOTES:

1. OVERALL SOUND LEVELS ARE FOR A FREQUENCY BAND OF FROM 60 TO 12000 CPS
2. ULTIMATE SOUND LEVELS ARE BASED UPON THRUSTS AS DETERMINED BY CAPACITY OF TEST STANDS.

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL (db) BASED UPON RATED CAPACITY OF TEST STAND (1000 K)

LOCATION AT OBSERVATION POINT

TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN

MAXIMUM RECORDED SOUND LEVEL AT 360 KIPS (db)

NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE

AVERAGE SOUND LEVEL FOR AUDIBLE READINGS (db)

AVERAGE BACKGROUND SOUND LEVEL (db)

ESTIMATED COMMUNITY RESPONSE CRITERIA

VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ULTIMATE AND RECORDED SOUND LEVELS
COCA TEST AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

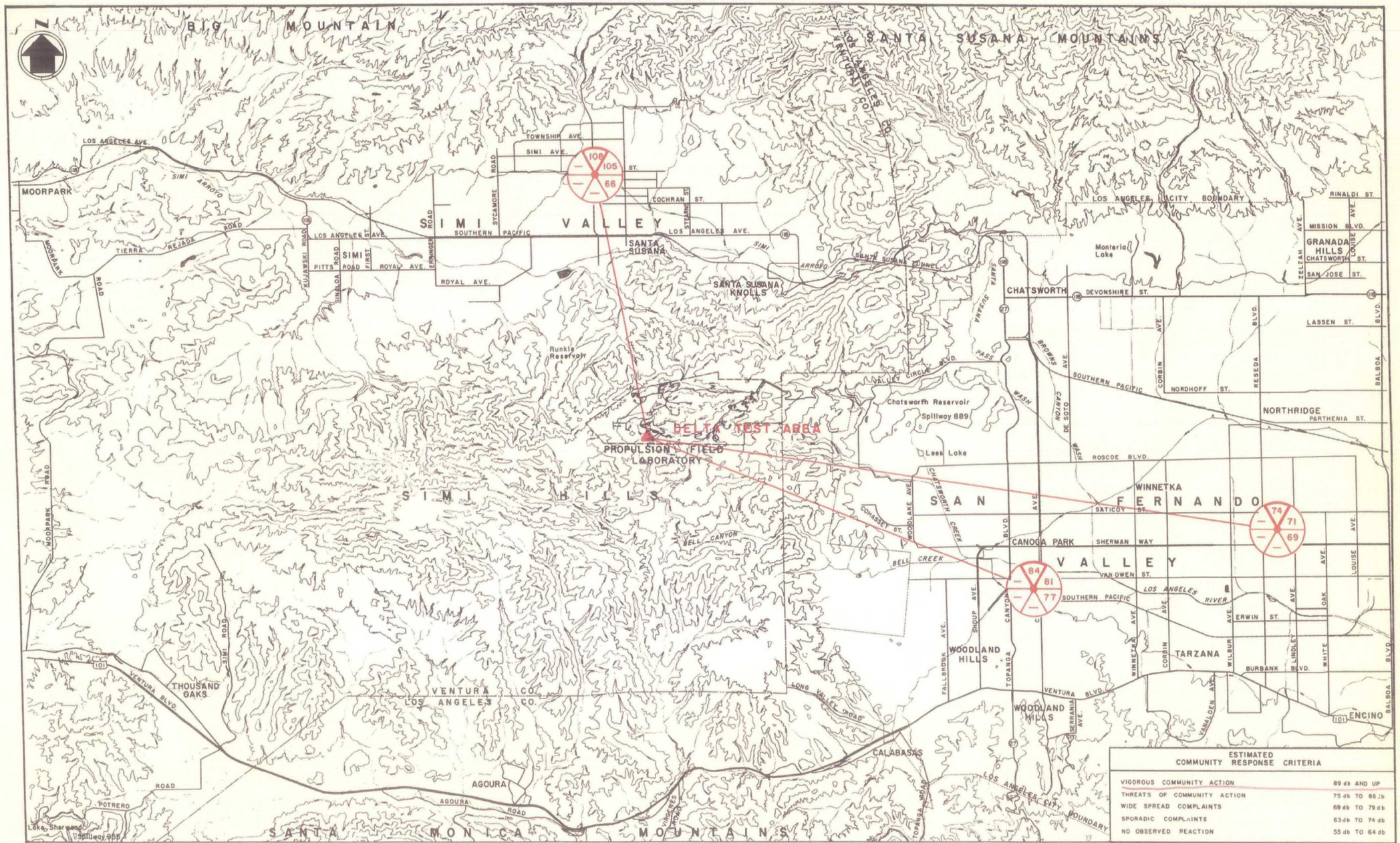
DATE JAN. 30, 1959

DRAWING NO. 28

COMPANY OFFICIAL

HDMSm00000166

COMPANY OFFICIAL



ESTIMATED COMMUNITY RESPONSE CRITERIA

VIGOROUS COMMUNITY ACTION	89 db AND UP
THREATS OF COMMUNITY ACTION	75 db TO 86 db
WIDE SPREAD COMPLAINTS	69 db TO 79 db
SPORADIC COMPLAINTS	63 db TO 74 db
NO OBSERVED REACTION	55 db TO 64 db

NOTES:

1. OVERALL SOUND LEVELS ARE BASED UPON MEASURED DATA AT OTHER TEST AREAS, DIRECTIVITY AND TERRAIN SHADOWING TO POINT OF OBSERVATION.
2. ULTIMATE SOUND LEVELS ARE BASED UPON RATED TEST STAND CAPACITY.

GRAPHIC SCALES

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

ESTIMATED SOUND LEVEL FOR 1000K ROCKET ENGINE (db) ON BASIS OF MAXIMUM EST. SOUND LEVEL

TOTAL NUMBER OF SOUND LEVEL READINGS TAKEN

NUMBER OF SOUND LEVEL READINGS IN WHICH ROCKET NOISE WAS AUDIBLE

LOCATION AT OBSERVATION POINT

MAXIMUM ESTIMATED SOUND LEVEL AT 600 KIPS (db)

ESTIMATED AVERAGE SOUND LEVEL FOR 600 KIPS

AVERAGE BACKGROUND SOUND LEVEL (db)

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

ULTIMATE AND RECORDED SOUND LEVELS
DELTA TEST AREA

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

DATE JAN. 30 1959

DRAWING NO. 29

COMPANY OFFICIAL

HDMSm00000167

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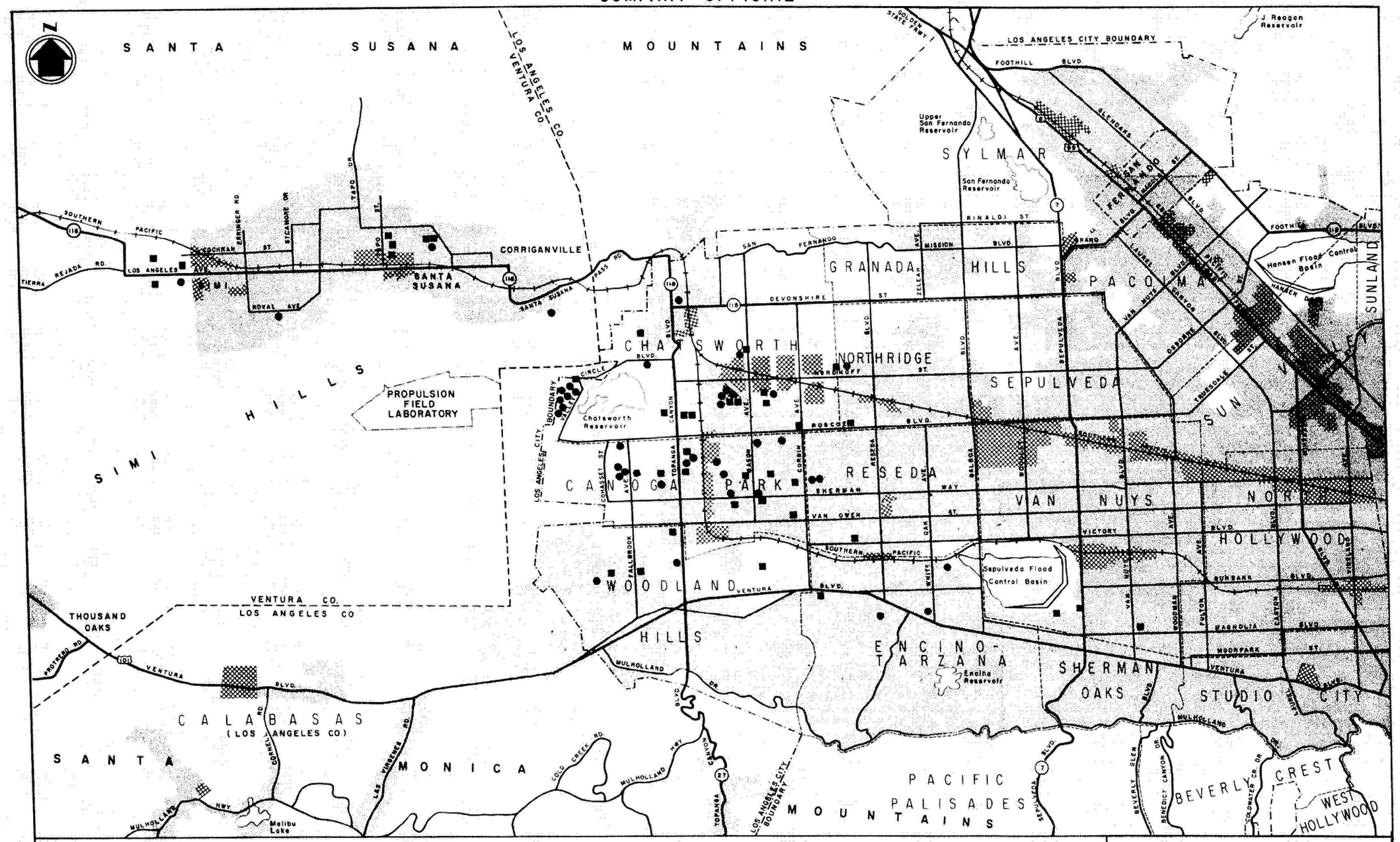


NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

COMPLAINT HISTORY
JANUARY TO DECEMBER 1958

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

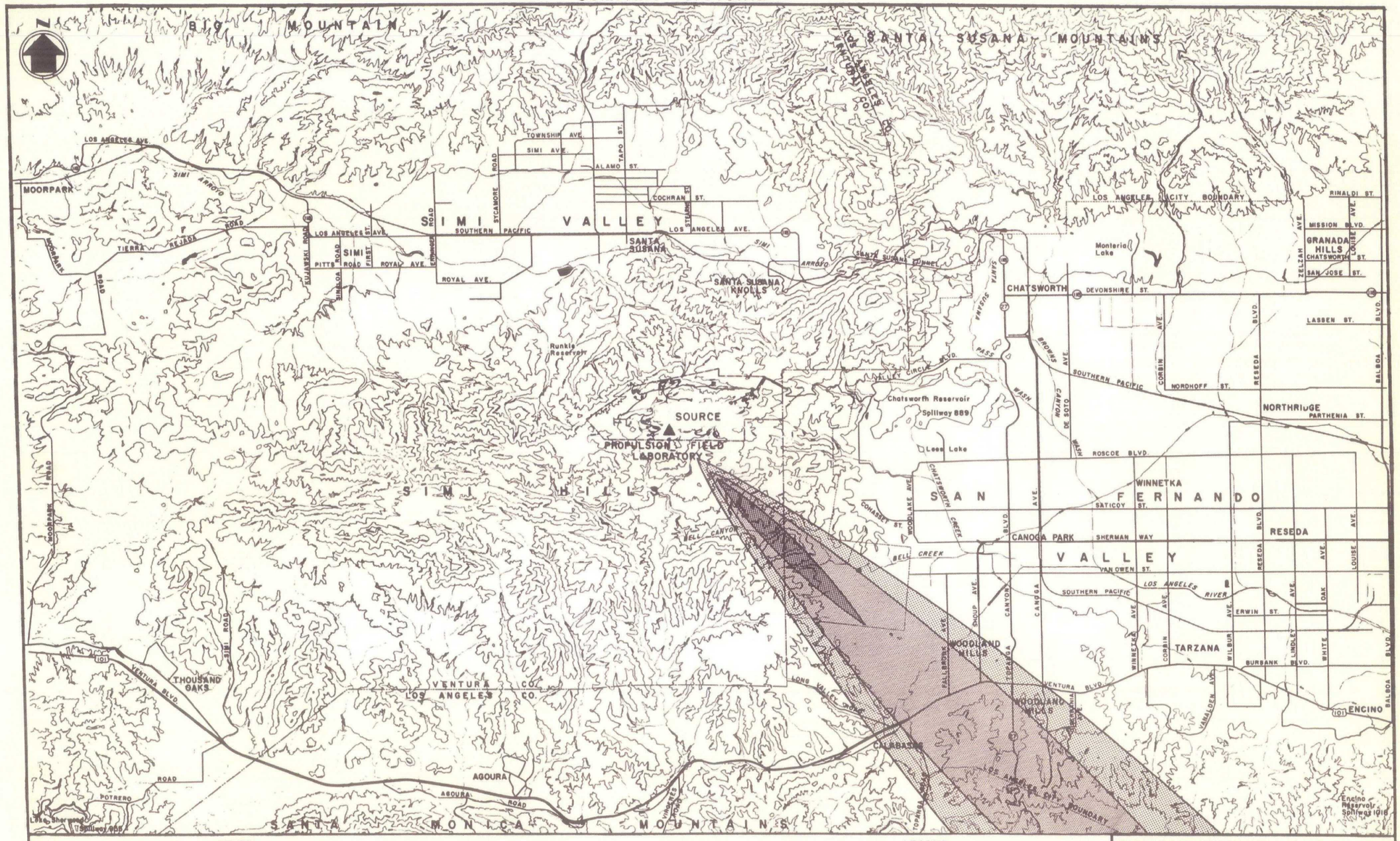
DATE JAN. 30 1959

DRAWING NO. 30

~~COMPANY OFFICIAL~~

HDMSm00000168

COMPANY OFFICIAL



NOTES:

ASSUMPTION:

1. TEMPERATURE GRADIENT - LAPSE
2. WIND DIRECTION - NORTHWEST
3. WIND SPEED - 11.2 M.P.H.
4. CLOUD RISE - 1000 FEET
5. SOURCE STRENGTH - 10 POUND/SEC.
6. SOURCE LOCATION - COCA TEST AREA

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- 101 FEDERAL ROUTE
- 27 STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

DOSAGE

- 1.0 TO 9.9 PPM
- 0.1 TO 0.9 PPM
- 0.01 TO 0.09 PPM

different gradients have different concentration levels at a given distance

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TYPICAL DOSAGE PATTERN FROM ENGINE EXHAUST

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

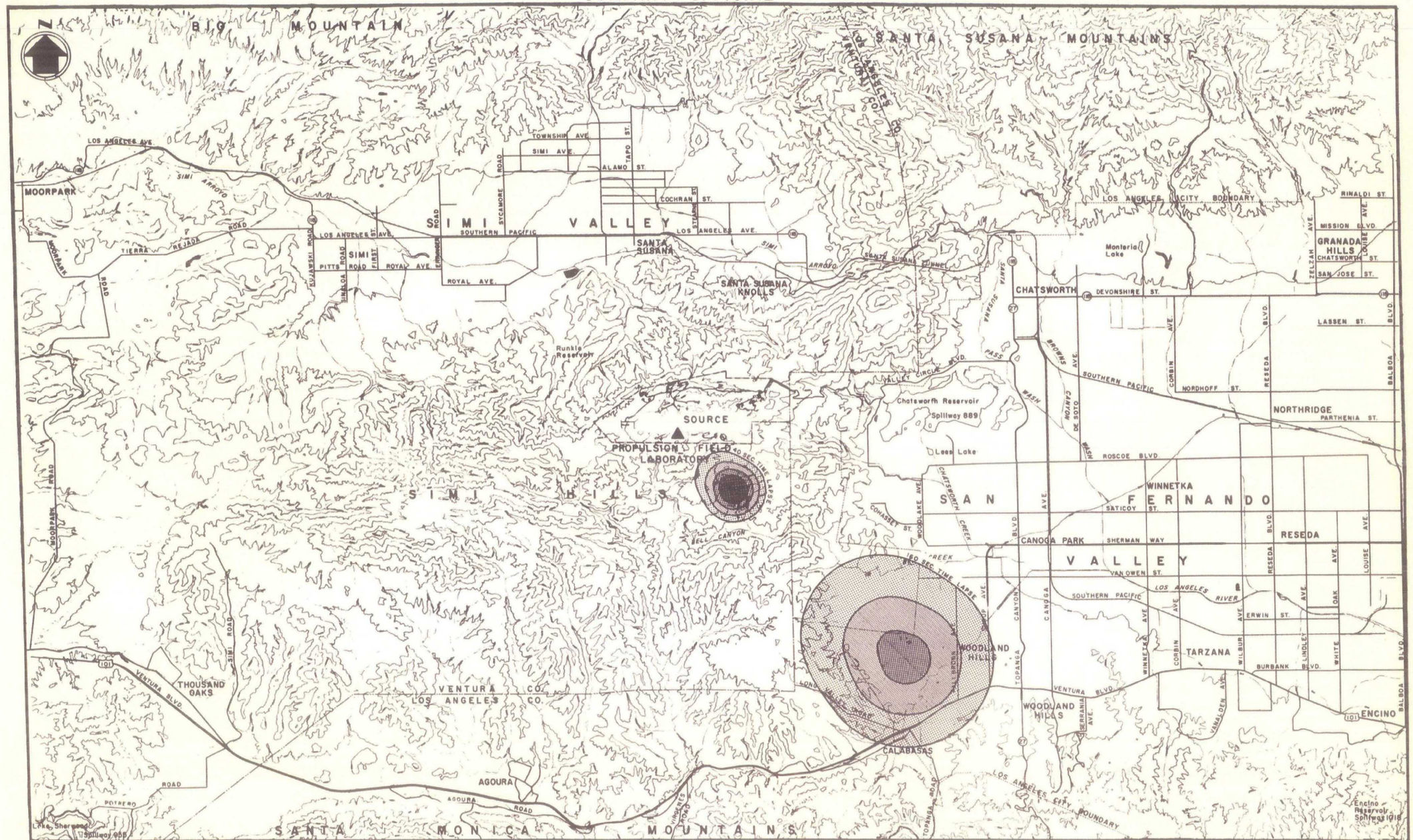
DATE 30 JAN. 1959

DRAWING NO. 31

COMPANY OFFICIAL

HDMSm0000016

COMPANY OFFICIAL



NOTES:

ASSUMPTION:

1. TEMPERATURE GRADIERT - LAPSE
2. WIND DIRECTION - NORTHWEST
3. WIND SPEED - 11.2 M.P.H.
4. CLOUD RISE - 300 FEET
5. SOURCE STRENGTH - 1000 POUNDS
6. SOURCE LOCATION - COCA TEST AREA

0 1/2 1 2 3 4 MILES

0 5,000 10,000 15,000 20,000 FEET

GRAPHIC SCALES

LEGEND

- ROADS
- (101) FEDERAL ROUTE
- (27) STATE ROUTE
- RAILROADS
- COUNTY BOUNDARY
- CITY BOUNDARY
- FACILITY BOUNDARY

DOSAGE

- 1.0 TO 9.9 PPM
- 0.1 TO 0.9 PPM
- 0.01 TO 0.09 PPM
- 0.001 TO 0.009 PPM

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

TYPICAL DOSAGE PATTERN FROM PROPELLANT SPILL

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

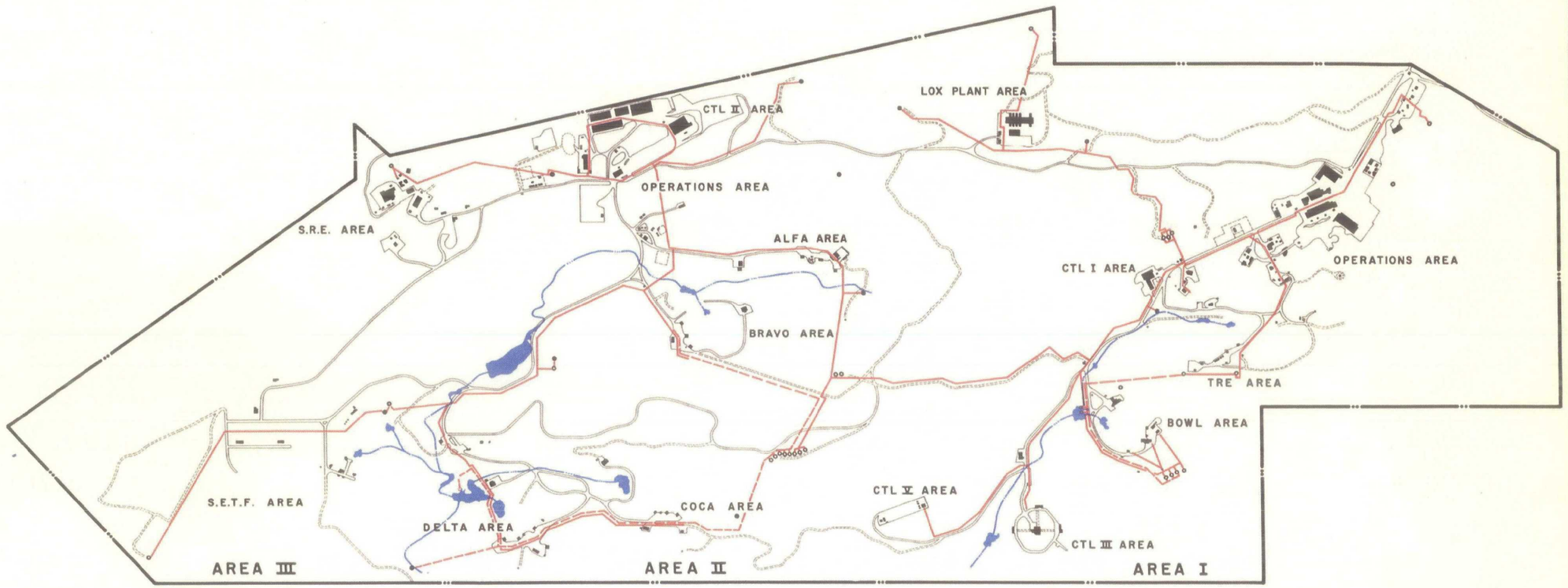
SCALE AS NOTED
DATE 30 JAN. 1959

DRAWING NO. 32

COMPANY OFFICIAL

HDMSm00000170

COMPANY OFFICIAL



0 1/4 1/2 MILE

0 600 1200 1800 2400 FEET

GRAPHIC SCALES

LEGEND

- STRUCTURES
- WATER TANK
- WATER WELL
- ROADS
- FRESH PROCESS WATER LINE
- RECLAIM WATER LINE
- RECLAIM WATER PUMP
- WATER COURSE
- WATER STORAGE AREA

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

WATER SUPPLY, RECLAMATION, AND WASTE SYSTEM

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

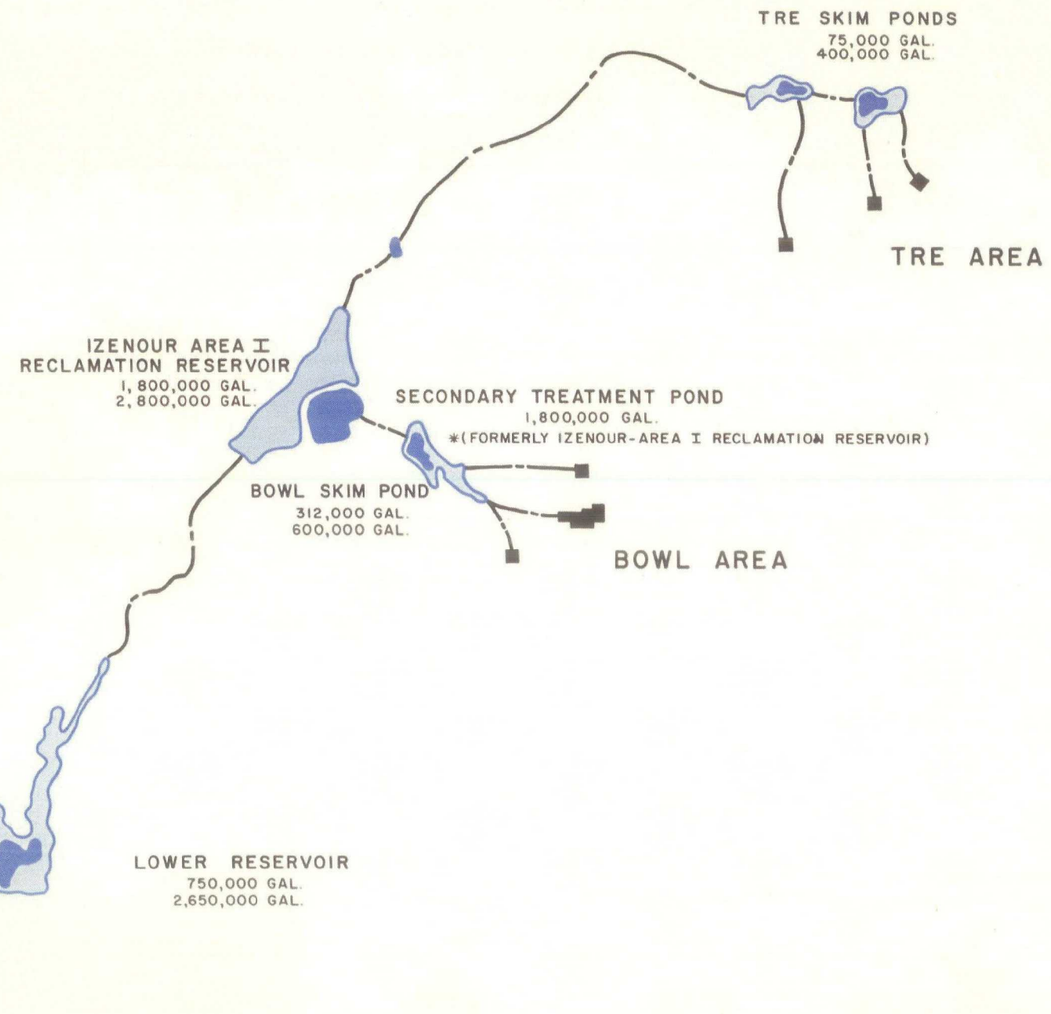
DATE JAN 30 1959

DRAWING NO. 33

COMPANY OFFICIAL

HDMSm00000171

~~COMPANY OFFICIAL~~



LEGEND

- EXISTING WATER STORAGE AREAS
- ULTIMATE WATER STORAGE AREAS
- SECONDARY TREATMENT POND *
- WATER COURSE
- TEST STAND

BOWL SKIM POND
75,000 GAL. EXISTING STORAGE CAPACITY
1,800,000 GAL. ULTIMATE STORAGE CAPACITY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

AREA I
EXISTING AND ULTIMATE INDUSTRIAL
SURFACE WATER STORAGE AREAS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

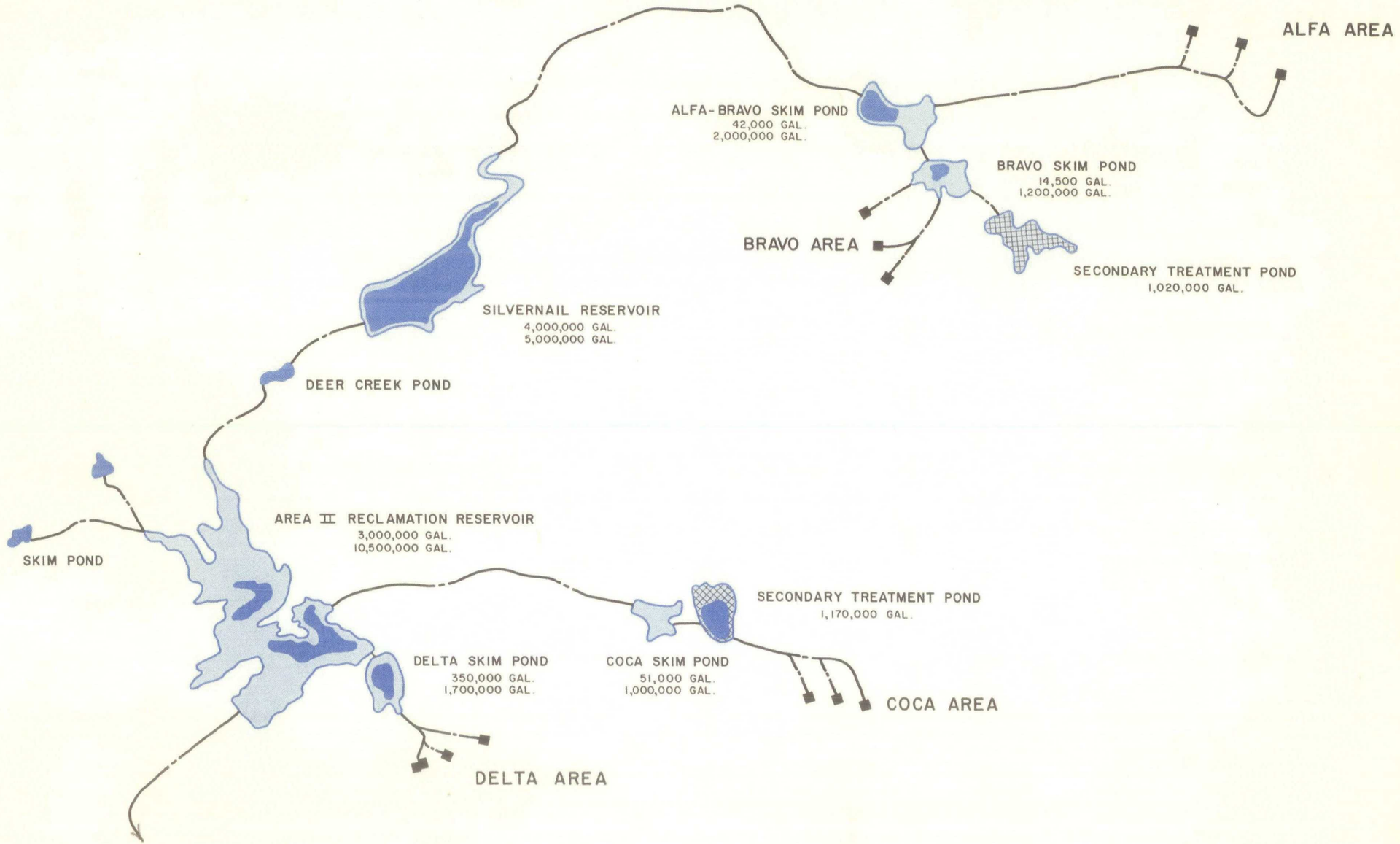
DATE JAN. 30 1959

DRAWING NO. 34

~~COMPANY OFFICIAL~~

HDMSm0000001722

COMPANY OFFICIAL



LEGEND

- EXISTING WATER STORAGE AREAS
- ULTIMATE WATER STORAGE AREAS
- NEW SECONDARY TREATMENT POND
- WATER COURSE
- TEST STAND

COCA SKIM POND
51,000 GAL. EXISTING STORAGE CAPACITY
1,000,000 GAL. ULTIMATE STORAGE CAPACITY

NORTH AMERICAN AVIATION, INC.
LOS ANGELES, CALIFORNIA

CAPABILITIES/LIMITATIONS STUDY
ROCKETDYNE DIVISION PROPULSION FIELD LABORATORY
SANTA SUSANA, CALIFORNIA

AREA II & III

EXISTING AND ULTIMATE INDUSTRIAL SURFACE WATER STORAGE AREAS

THE RALPH M. PARSONS COMPANY
ARCHITECT — ENGINEER
LOS ANGELES, CALIFORNIA

SCALE AS NOTED

DATE JAN. 30, 1959

DRAWING NO. 35

COMPANY OFFICIAL

HDMSm00000173